ORDER NO. VRD9[illegible]2M158

Service Manual

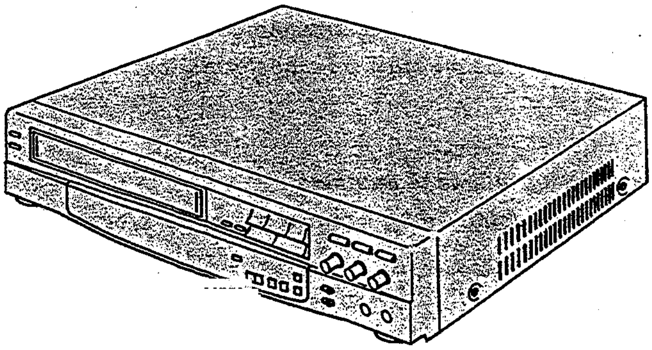
Video Cassette Recorder

Panasonic VHS
PAL NTSC

Hi-Fi HQ

NV-F125BD
NV-HD100AM

General Description
Adjustment Procedures
Block/Schematic Diagrams
Exploded Views/Parts List



SPECIFICATIONS

ITEM	SPECIFICATION
POWER	SOURCE: 110~240V 50/60Hz
	CONSUMPTION: 32 watts (NV-HD100AM) 29 watts (NV-F125BD)
RECORDING SYSTEM	2 rotary heads, helical scanning system
	PAL/NTSC
TV TUNER SYSTEM	VHF I: CH2~CH4 (PAL B/SECAM B) CH1~CH5 (PAL D/SECAM D, KI) CH2~CH6 (NTSC M) VHF III: CH5~CH12 (PAL B/SECAM B) CH6~CH12 (PAL D/SECAM D, KI) CH7~CH13 (NTSC M) UHF: CH21~CH69 (PAL G, H, I/SECAM G, K) CH13~CH57 (PAL D) CH14~CH79 (NTSC M) 75Ω terminated
RF OUT SYSTEM	UHF: CH38$^{+2}_{-6}$ (PAL G, H, I/SECAM G, K) CH25$^{+2}_{-1}$ (PAL D) CH29~CH39 (NTSC M) 73±3dBμ, 75Ω terminated
VIDEO	HEADS: 4 rotary heads 1 pair for SP recording, playback and trick play (L-R heads) 1 pair for LP recording, playback and trick play (L′-R′ heads)
	INPUT: VIDEO IN Connector (Phono type) 1.0Vp-p, 75Ω unbalanced
	OUTPUT: VIDEO OUT Connector (Phono type) 1.0Vp-p, 75Ω unbalanced

ITEM	SPECIFICATION
AUDIO	HEAD: 1 Stationary head (Normal Audio) 2 rotary heads (Hi-Fi 2CH)
	INPUT: AUDIO IN Connector (Phono type) More than −10dBV (316mV), more than 47kΩ MICROPHONE JACK −70dBV
	OUTPUT: AUDIO OUT Connector (Phono type) −8dBV (400mV), Less than 1kΩ
	TRACK: 1 track (Normal-mono only) 2 channels (Hi-Fi Sound-Stereo)
TAPE FORMAT	VHS Cassette tape (Tape width 12.7mm)
TAPE SPEED	SP: 23.39mm/s (PAL), 33.35mm/s (NTSC) LP: 11.695mm/s (PAL), 11.12mm/s (NTSC) Record/Playback Time: SP: 4 hours with 240min. type tape LP: 8 hours with 240min. type tape FF/REW Time: 2.5min. with 180min. type tape
DIMENSIONS	430(W)×96(H)×355(D) mm
WEIGHT	5.3kg
STANDARD ACCESSORIES	1 pc. DIN-RF Cable 1 pc. Infra-red Remote Controller 1 pc. Audio Cables 1 pc. AC Mains Lead 1 pc. AC Plug Adaptor 1 pc. Separate Transformer Adaptor 2 pcs. Microphone (NV-HD100AM) 1 pc. 300Ω−75Ω Transformer (NV-F125BD)

Weight and dimensions shown are approximate.
Specifications are subject to change without notice.

Panasonic

INTRODUCTION

This service manual contains technical information which will allow service personnels to understand and service this model.
Section 1 presents you with some general information of features and controls, enabling you to become familiar with each function.
Section 2 contributes to your mechanical and electrical adjustment as well disassembly and replacement procedures.
In the case of very common information relating to other models like mechanical adjustments, please refer to each service manual.
Section 3, 4 contains block diagrams which offers you information for checking and understanding each circuit. Schematic diagrams which give you detailed information such as waveforms, voltage data, function e.t.c...
Section 5 contains exploded views and parts list.
Please place orders using the parts list and not the drawing reference numbers.
If the circuit is changed or modified, this information will be followed by supplementary service manual to be filed with original service manual.

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SERVICE INFORMATION

1-1. HOW TO CHECK THE CRACKED CHIP PART

(1) Apply heat to the soldered portions of chip part using a soldering iron for about 2–3 seconds.
(2) If the chip part is faulty,it will be broken or cracked.

Caution: Do not leave soldering iron on the PCB too long as damage may occur to the PCB or the chip parts.

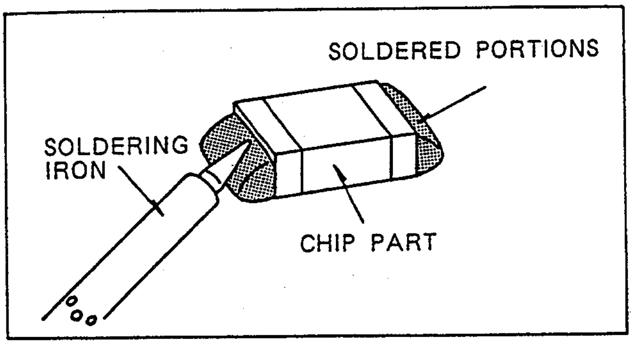

SOLDERED PORTIONS
SOLDERING IRON
CHIP PART

FIG. G1

Note: Regarding intermittent faults
The main causes of these faults are poor soldering and cracked chip parts.

1-2. HOW TO REPLACE THE CHIP PART

1) REMOVAL (RESISTOR, CAPACITOR, etc...)

(1) Presolder the one side of soldering portion for chip part and grasp the chip part by tweezers.

(2) Melt the presoldered portion. And then remove the chip part with a twisting motion while melting the soldering portion of another side quickly.

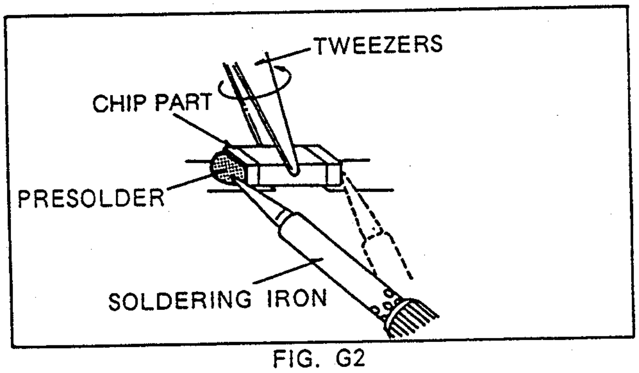

TWEEZERS
CHIP PART
PRESOLDER
SOLDERING IRON

FIG. G2

2) REMOVAL (transistor, diode, etc...)

(1) Grasp the chip part with tweezers and melt the solder of one lead.

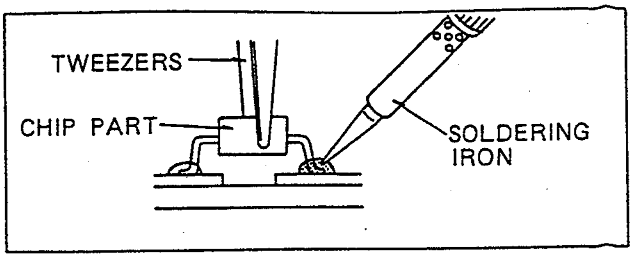

TWEEZERS
CHIP PART
SOLDERING IRON

FIG. G3

(2) Lift the side of that lead upward.

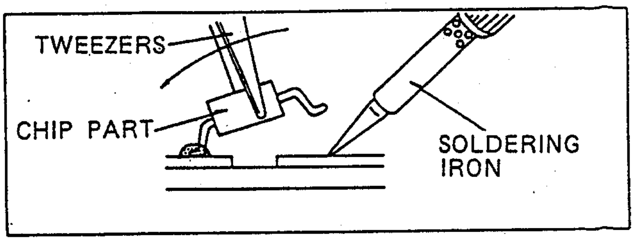

TWEEZERS
CHIP PART
SOLDERING IRON

FIG. G4

Caution: Do not lift the chip part too high as damage may occur to the PCB or the leads that are still soldered on the PCB.

(3) Simultaneously heat the solder of the two remaining leads and lift part to remove.

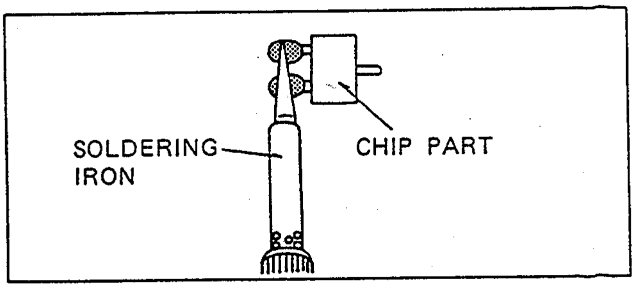

SOLDERING IRON
CHIP PART

FIG. G5

3) INSTALLATION

(1) Presolder the one side of contact point on the circuit board.

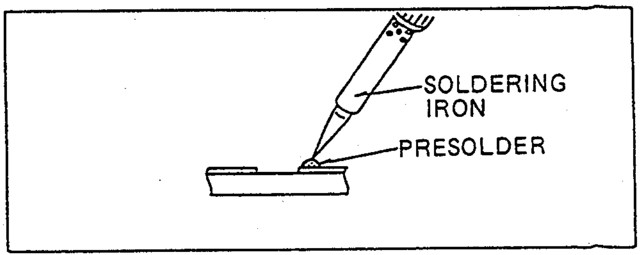

SOLDERING IRON
PRESOLDER

FIG. G6

(2) To install the chip part,hold in position using tweezers, apply heat to the pre–soldered portions using a fine tip soldering iron.
(3) Solder the other side of the chip part.
(4) Check your soldering.

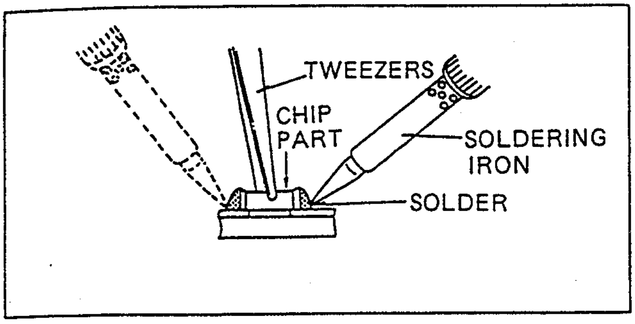

TWEEZERS
CHIP PART
SOLDERING IRON
SOLDER

FIG. G7

1-3. HOW TO REMOVE THE FLAT-IC

(WITH HOT–AIR FLAT–IC DESOLDERING MACHINE)

(FOR EXAMPLE)

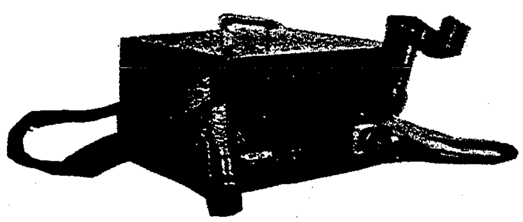


FIG. G8

(1) Prepare the HOT–AIR FLAT–IC DESOLDERING MACHINE. And then apply hot air to FLAT–IC about 5 ~ 8 seconds.

(2) Remove the FLAT–IC with tweezers while applying the hot air.

Caution: Do not supply the hot air to the chip parts around the Flat–IC for long time as as damage may occur to the chip parts around the Flat –IC.

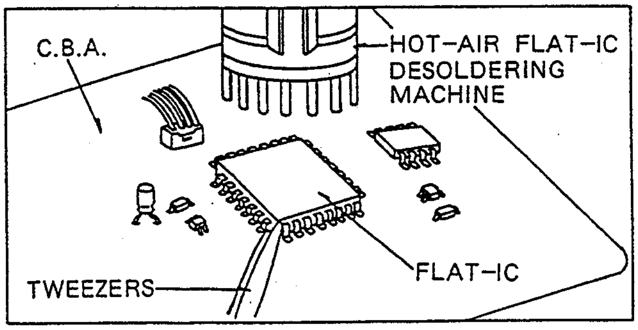

C.B.A.
HOT–AIR FLAT–IC DESOLDERING MACHINE
FLAT–IC
TWEEZERS

FIG. G9

(WITH SOLDERING IRON)

(1) Using solder braid remove the solder from all pins of the Flat–IC.
When you use the solder flux which is applied to all pins of the Flat–IC,you can remove it easily.

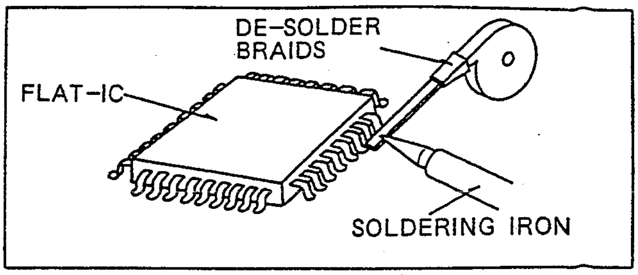

DE–SOLDER BRAIDS
FLAT–IC
SOLDERING IRON

FIG. G10

(2) Lift each lead of the Flat–IC upward one by one using a sharp pin or non solder wire(iron wire),while heating the pins using a fine tip soldering iron or a hot air blower.

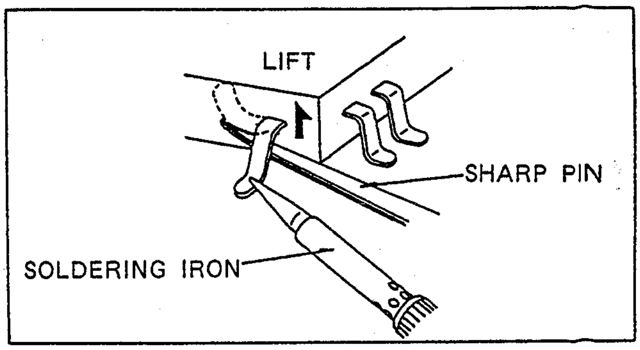

LIFT
SHARP PIN
SOLDERING IRON

FIG. G11

(WITH IRON WIRE)

(1) Affix the wire to workbench or solid mounting point as shown in FIG.G12.
(2) Pull up wire as the solder melts so as to lift the IC lead from the PCB contact pad,while heating the pins using a fine tip soldering iron or hot air blower.

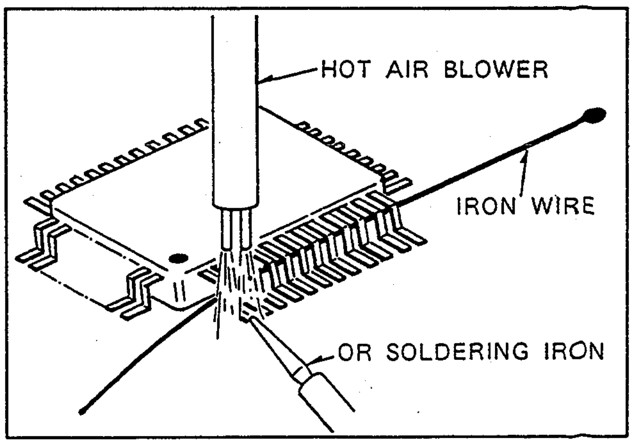

HOT AIR BLOWER
IRON WIRE
OR SOLDERING IRON

FIG.G12

Note: When using a soldering iron care must be taken to ensure that the Flat IC is not being held by glue before it is the PCB may be damaged if force is used.

SECTION 1
GENERAL DESCRIPTIONS

1-1. TECHNICAL INFORMATION

1–1–1. INITIALIZATION OF CHANNEL MEMORY IC (IC7503/M6M80021P)

When replacing the channel memory IC (IC7503/ M6M80021P), the memory IC should be initialized to original specifications.

Note:

1) This should be performed before tuner preset.
2) During initialization or after initialization within 1 second, do not disconnect the power source.
3) "INITIALIZATION" erases the "SKIP CH" and makes the POSITION CH and DISPLAY CH the same.

Method:

1) Press the CH UP/DOWN Button so that the Channel indicator indicates "3".
2) Connect a jumper wire between Pin 54 and Pin 35 of IC7501 for more than 1 second.
3) Channel indication should change from "3" to "1".

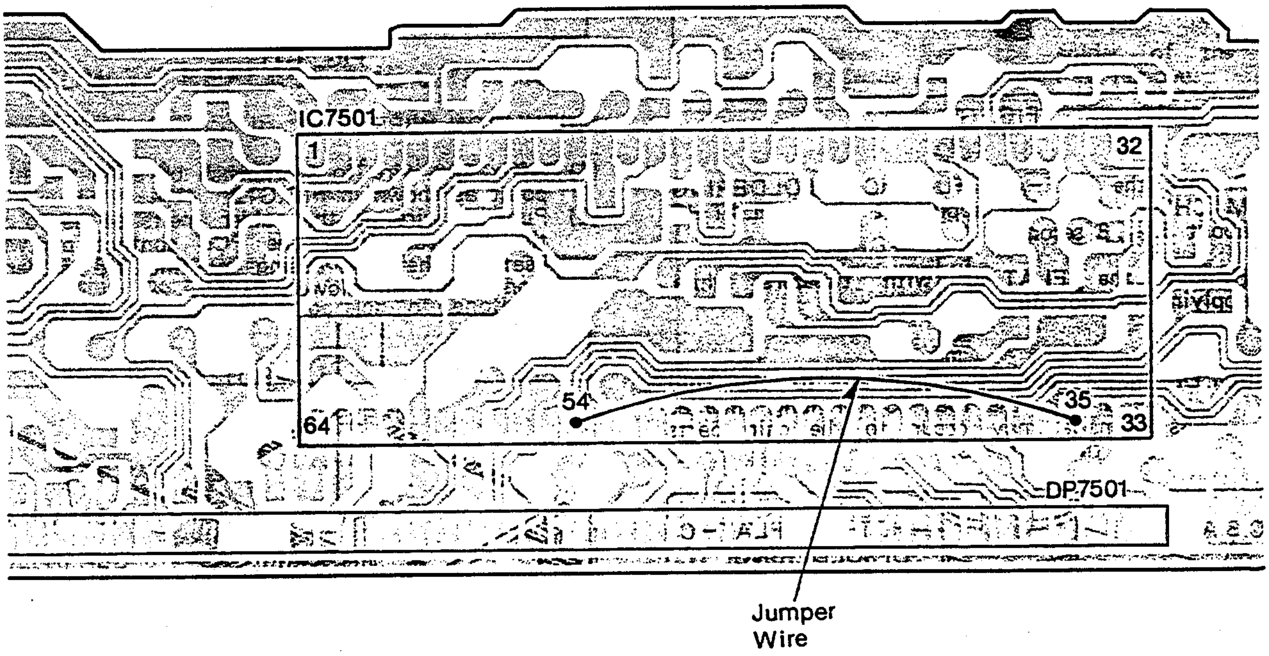


Fig. T1

1-1-2. ASSEMBLY OF CAPSTAN STATOR UNIT

When replacing the CAPSTAN STATOR UNIT, the CENTRE FIXING TOOL(VFK0851) must be used to fix the centre of CAPSTAN STATOR UNIT.

Method:

1) Place the CAPSTAN STATOR UNIT into position.
2) Loosely tighten the 3 screws.
3) Insert the CENTRE FIXING TOOL(VFK0851) as shown in Fig.T2.
4) Tighten the 3 screws.

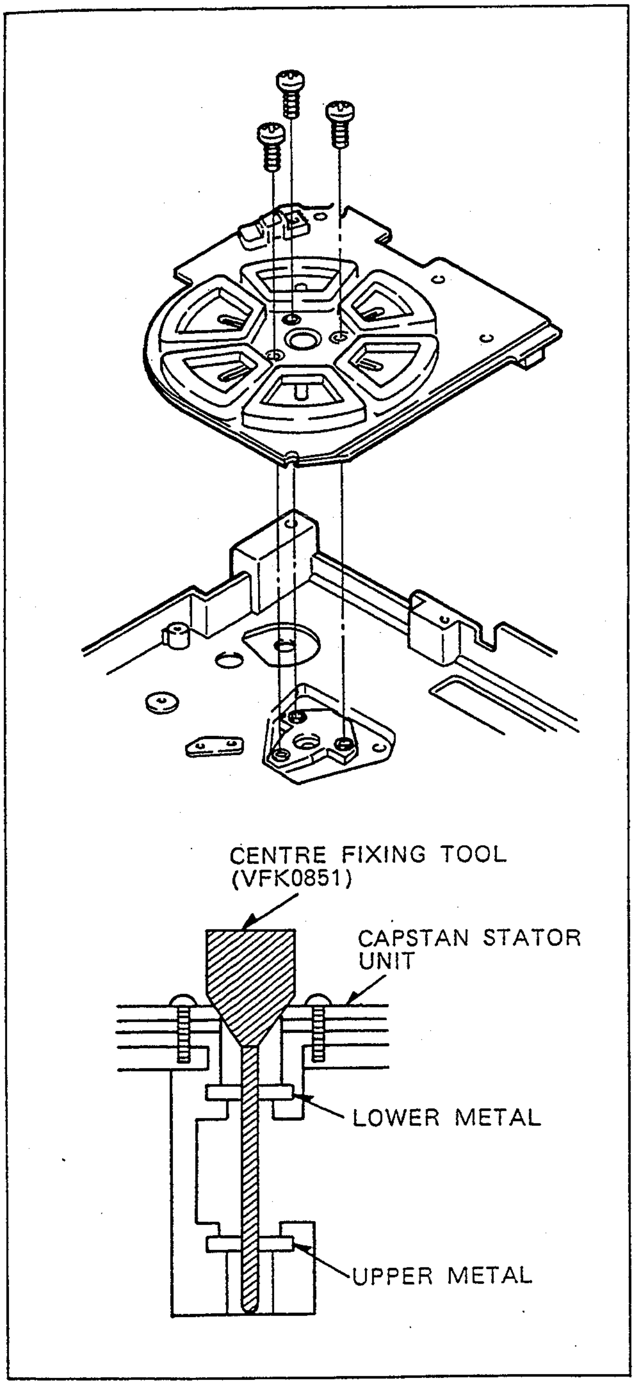

CENTRE FIXING TOOL (VFK0851)
CAPSTAN STATOR UNIT
LOWER METAL
UPPER METAL

Fig. T2

1-1-3. EJECT OPERATION

The main cam gear rotates in the direction of the arrow. The projection (B) of the carriage connection gear engages with the recession (A) of the main cam gear. The carriage connection gear rotates in the direction of the arrow to perform the Eject operation.

<NOTE>
If the Eject operation is performed without the cassette carriage installed while repairing or making the mechanical phase alignment, the main cam gear will not engage with the carriage connection gear and the carriage connection gear will not rotate. For performing the Eject operation with the cassette carriage not installed, it is necessary to rotate to the carriage connection gear by hand in the direction of the arrow.

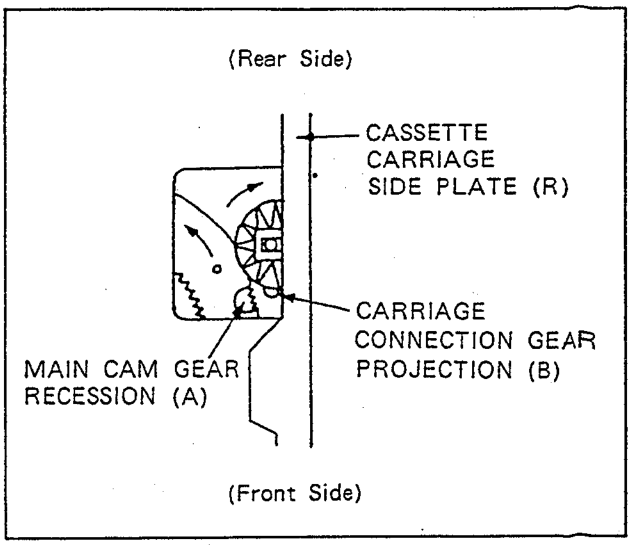

(Rear Side)
CASSETTE CARRIAGE SIDE PLATE (R)
CARRIAGE CONNECTION GEAR PROJECTION (B)
MAIN CAM GEAR RECESSION (A)
(Front Side)

Fig. T3 Top View of Eject Operation

1-1-4. SERVICE INFORMATION DISPLAY

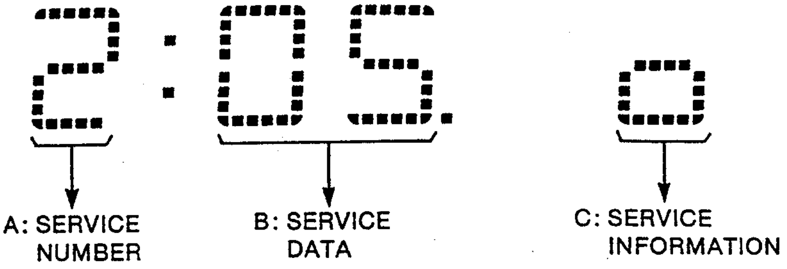
This unit can be checked using the mode information which is detected by microprocessor IC6001 via multi function display.

Method:

1) Press the "EJECT" button while pressing the "FF" and "REW" button simultaneously.
2) The counter of multi function display indicates microprocessor data approximately 1 minutes as shown in Fig.T4.

Note:

1) This mode can be entered even when the power is OFF.
2) It can also display the data when a jumper wire is connected between TP6001 and TPGND.
3) Press the "EJECT" button while pressing the "FF" and "REW" buttons to increase the service number.



A: SERVICE NUMBER	B: SERVICE DATA	CONTENTS	REMARKS
1	*0	can not detect Take-up and Supply Photo	
	*1	detect Take-up Photo	
	*2	detect Supply Photo	
	*3	detect Take-up and Supply Photo	
2	00	EJECT	
	01	CASSETTE DOWN	
	02	REVIEW	
	04	PLAY/STOP/CUE	
	06	FF/REW	
	07	During moving of each mode	
5	8*	CAPSTAN MOTOR ON	In case of the indication (8/9/U/A/-/⊓/L) or no indication, CAP MOTOR is turned on.
	*7	CAPSTAN MOTOR ROTATING DIRECTION	In case of the indication (0/1/2/3/4/5/6/7), CAP MOTOR is rotated in forward direction.
	*8	CAPSTAN MOTOR ROTATING DIRECTION	In case of the indication (8/9/U/A/-/⊓/L) or no indication, CAP MOTOR is rotated in REVERS direction.
6	1*		In case of the indication (1/3/5/7/9/A/⊓) or no indication, CYL MOTOR is turned on.

NOTE: "*"; No meaning

C: SERVICE INFORMATION
0: Normal
1: Cylinder lock (STOP)
2: Reel lock (STOP)
3: Mechanism lock during moving next position except NO. 4 or NO. 6 of service information. (In this case, loading motor can be expected to break down.)
4: Mechanism lock during unloading
5: Less pulse of reels during unloading (In this case, capstan can be expected to break down.)
6: Mechanism lock during front loading (Cassette IN)
7: Serial data (IC6001—IC7501) can not be transmitted.

Fig. T4

1-2. OPERATING INSTRUCTIONS

Precautions

Please read these cautions before you operate this VTR.

Cassette Compartment Door

When first unpacking the unit, you may notice that the cassette compartment door is partially open. This condition is due to the operation of a safety device designed to protect the unit from vibration during shipment; it is not a malfunction. When the AC mains lead is connected to a mains outlet, the door will return to its original position.

Avoid Sudden Changes in Temperature

If the VTR is suddenly moved from a cold place to a warm place, moisture may form on the tape and inside the VTR. In this case, the Dew Indicator ":" will flash on and off and the VTR will not operate.

Humidity and Dust

Avoid places where there is high humidity or much dust, which may cause damage to internal parts.

Do Not Obstruct the Ventilation Holes

The ventilation holes prevent abnormal increase in temperature. Do not block or cover these holes. Especially avoid covering the holes with soft materials such as cloth or paper.

Keep away from High Temperature

Keep the VTR away from extreme direct heat such as direct sunlight, heating radiators, or closed automobiles.

Keep Magnets away

Never bring a magnet or magnetized object near the VTR because it will adversely affect the performance of the VTR.

No Fingers or Other Objects Inside

Touching internal parts of this VTR is dangerous, and may cause serious damage to the VTR. Do not attempt to disassemble the VTR. There are no user serviceable parts inside.

Keep Water away

Keep the VTR away from flower vases, tubs, sinks, etc. CAUTION: If liquids are spilled into the VTR, serious damage could occur. If you spill any liquid into the VTR, consult qualified service personnel.

Lightning

To avoid damage by lightning, disconnect the aerial plug from the VTR.

Cleaning the VTR

Wipe the VTR with a clean, dry cloth. Never use cleaning fluid, or other chemicals. And do not use compressed air to remove dust.

Stacking

Place the VTR in a horizontal position, and do not place anything heavy on it.

Video Head Clogging

The video heads place picture signals on the tape during recording and read picture signals from the tape during playback and they are, therefore, of critical importance for the picture quality. To ensure that they can always provide optimum picture quality, this VTR is equipped with an Auto Head Cleaning Function that removes tape particles and dust from the video heads. However, if the VTR is used over extremely long periods of time, these heads may still become dirty and clogged. In such a case, the signals can no longer be recorded correctly, and the playback picture will be distorted accordingly. This is the case, for example, during the playback of a tape, the sound is reproduced normally, but no picture is seen, or the picture is greatly distorted. When such a symptom case occurs have the recorder checked by qualified service personnel.

If Dew Condensation Forms in the VTR

Condensation may form in the VTR if:

- The VTR is in a room when the heater has just been turned on.
- The VTR is in a room with steam or high humidity.
- The VTR is brought from cold surroundings into a well-heated room.
- The VTR is suddenly brought from cool surroundings, such as an air-conditioned room or car, to a place which is hot and humid.

When dew forms in the VTR:

The Dew Indicator ":" on the Multi-Function Display will flash on and off and all the function buttons are made non-operational to protect the tape and the video heads. When the Dew Indicator flashes, wait until this indicator disappears.

- If dew condensation forms inside the VTR while the VTR On/Off Switch is off, it will turn on automatically and the Dew Indicator will flash on and off. As soon as the dew condensation has been dissolved, the VTR will turn itself off again.

Tape Care

Some do's and don'ts on tape care.

DO:

1) Use a good quality branded tape, such as Panasonic.
2) Keep in the Box supplied with your tape, or a video case, when not in use.
3) Try to use all the tape on a cassette by making recordings not only at the tape start but also in the middle and end sections. This will avoid many repeated recordings at the beginning of the tape resulting in premature wear.
4) Take care to insert a tape correctly into the VTR to avoid damage.

DO NOT:

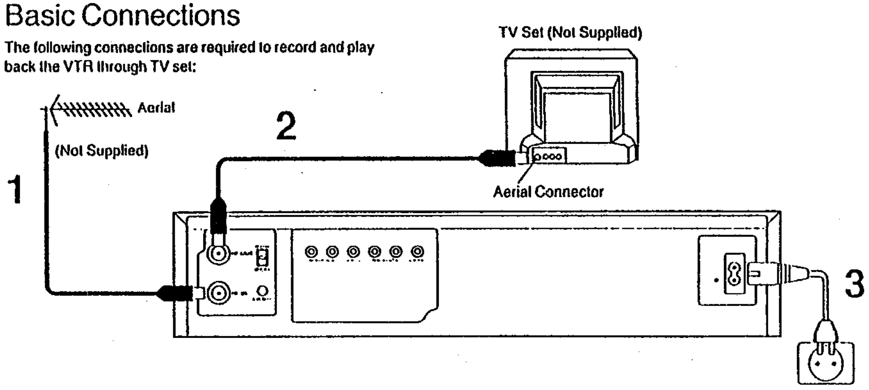
1) Expose the tape to high humidity or temperature.
2) Expose to liquid.
3) Expose to dust particles by storing directly on a carpet for example.
4) Use a damaged tape or attempt to repair.
5) Dismantle the cassette housing.
6) Attempt to lift the front cassette flap or touch the tape surface.

Connections

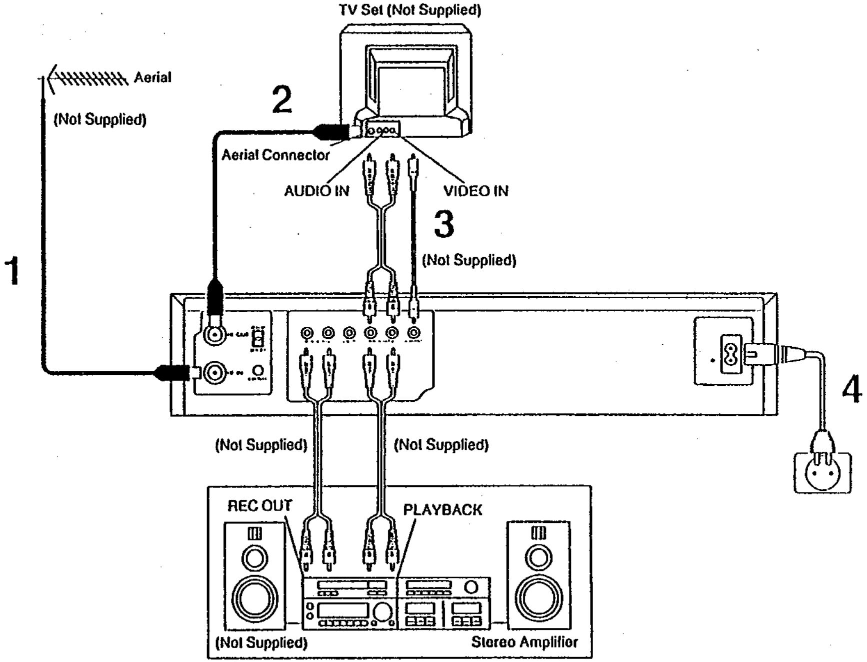
This tells you how to connect with an aerial, TV, etc.

Basic Connections

The following connections are required to record and play back the VTR through TV set:

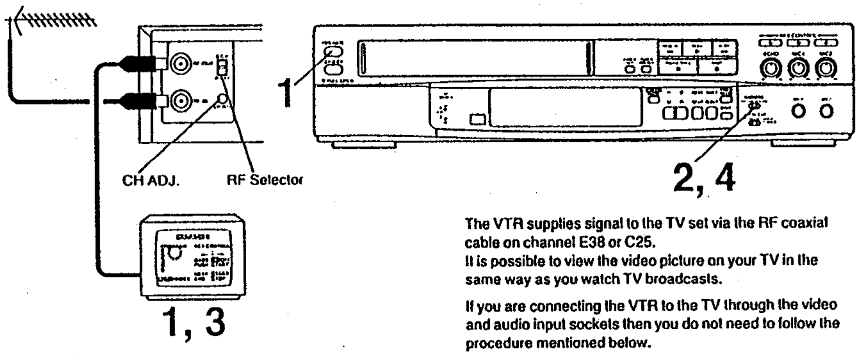


Connection to a TV Set with the Audio/Video IN Sockets



•Connection to a Stereo Amplifier

Tuning the TV into your VTR



The VTR supplies signal to the TV set via the RF coaxial cable on channel E38 or C25.
It is possible to view the video picture on your TV in the same way as you watch TV broadcasts.

If you are connecting the VTR to the TV through the video and audio input sockets then you do not need to follow the procedure mentioned below.

Operations

1 OPERATE

Turn the TV and VTR on.

2

KARAOKE
OFF
ON

Set KARAOKE to ON.

3

Set the TV to an unused position which you wish to use for your video playback.
- Confirm on your TV set that the Karaoke Selection Mode appears.

4

KARAOKE
OFF
ON

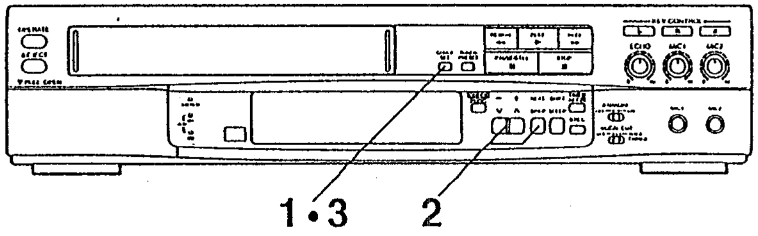
Set KARAOKE to OFF.

Note:
The test signal is transmitted on video channel C25 (PAL D) or E38 (PAL B.G.H.I.K.K1). If you are encountering interference from a TV broadcast on this video channel, you may readjust to another free channel (C24~27, E32~40) by using the CH ADJ. screw which is located on the rear of the VTR.
Please note that if the CH ADJ. screw is used then you will have to retune your TV to the test signal as in item 2 to 4 above.

RF Selector
Use the RF Selector to select the colour TV system used by the TV set to be connected.

B.G.H:	PAL B.G.H
I:	PAL I
D.K.K1:	PAL D/SECAM K.K1

Setting the Clock of the VTR



The built-in clock is used to activate the timer for automatic recording and must be set to the correct time.

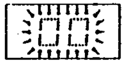
The built-in digital clock employs the 24-hour system.

Preparation
Turn on the VTR.

For Example:
Date; 16th, October, 1999
Time; 20:15

Operations **Display Symbols**

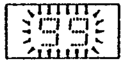
1 CLOCK SET



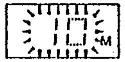
Keep **CLOCK SET** pressed until a bleep sound is heard.

2 Set each item by pressing + or – and NEXT.

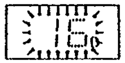
– +
∨ ∧



Set Year "99".

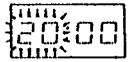


Set Month "10".

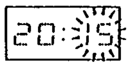


Set Date "16".

NEXT
SP/LP

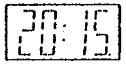


Set Hour "20".



Set Minute "15".
- There is no need to press NEXT.

3 CLOCK SET

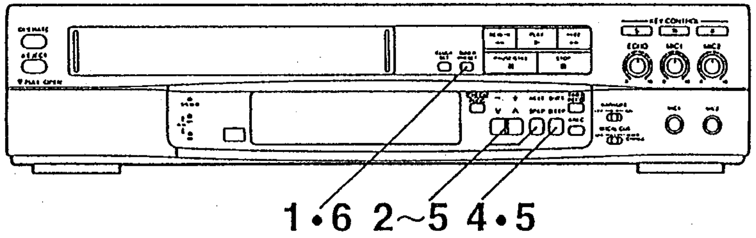


Press **CLOCK SET**.
- The clock will start.

Note:
The clock operates for at least 60 minutes by its backup system in the event of power failure.

Time reset function
XX:00.00 can be set by performing the operation steps 1 and 3 during XX:58.00~XX:01.59.

Storing TV Broadcasts into your VTR



Introduction

The VTR is fitted with its own tuner (just like a normal TV set) and can be pre-set to receive up to 99 TV broadcast stations.

Preparation

- Confirm that the TV is on and the VTR viewing channel is selected.
- Turn on the VTR and Select the programme position except A1.

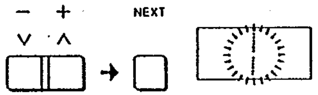
Operations **Display Symbols**

1

TUNER PRESET

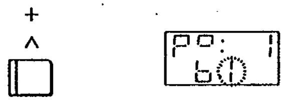
Keep **TUNER PRESET** pressed until a bleep sound is heard.

2



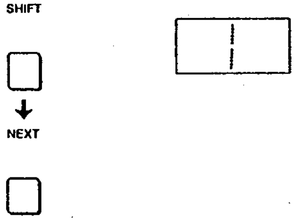
Select the programme position, then press NEXT.

3



Select TV band "I", "III" or "U".

4

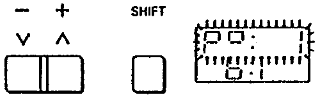


Select the broadcasting system.

- 1 (PAL B.G.D/SECAM K):
  For receiving PAL B.G.D or SECAM K system broadcasts. Press PAL/MESECAM to select SECAM system so that MESECAM indicator is lit.
- 2 (PAL I):
  For receiving PAL I system broadcasts.
- 3 (NTSC):
  For receiving NTSC system broadcasts.

Then press NEXT.

5



Search for the required TV station.

- The station changes quickly by pressing SHIFT simultaneously with + or −.
- Press NEXT and repeat steps 2–5 for each programme position you want to tune to a station.

6

TUNER PRESET

Press **TUNER PRESET** twice.

Fine Tuning Procedure

1 Press TUNER PRESET until a bleep sound is heard, and then press again.

2 Press NEXT.

3 Press + or − to obtain the best tuning condition.
- "AFC" indicator disappears.
- To return the tuning to its former state, press SHIFT.

4 Press TUNER PRESET.

Blanking of Unoccupied Programme Positions

1 Press TUNER PRESET until a bleep sound is heard.

2 Select a programme position which you do not want to tune to a TV station, by using + or −.

3 Press SHIFT. ("− −" is displayed.)
- Repeat steps 2 and 3 for another unoccupied programme positions to skip during the selection of the programme positions.
- To cancel the blanking of a programme position, select that programme position on the VTR and then press SHIFT.

4 Press TUNER PRESET twice.

Channel Plan (NV-F125BD)

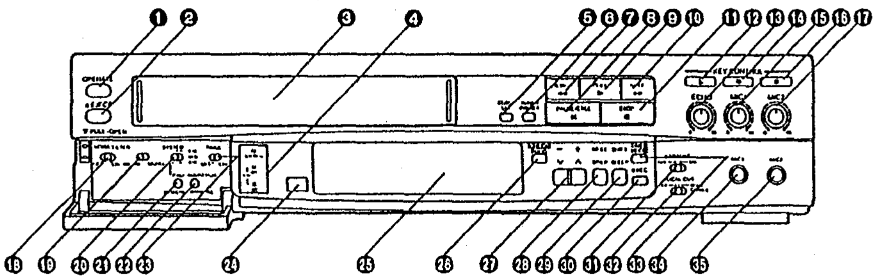
	VHF		UHF
	I	III	U
PAL B.G	2–4	5–12	21–69
PAL D	1–5	6–12	13–56
PAL I	NOT AVAILABLE		21–69
SECAM D.K.K1	1–5	6–12	21–69
NTSC	2–6	7–13	14–69

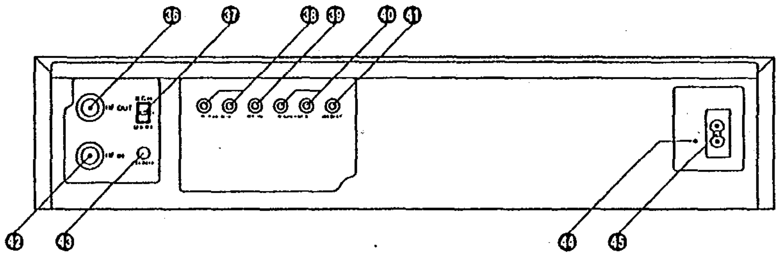
Channel Plan (NV-HD100AM)

SYSTEM		VHF		UHF
		I	III	U
1	CCIR STD (B.G.H)	2–4	5–12	21–69
	CHINA (D)	1–5	6–12	13–57
	EAST EU (D.K.K1)	1–5	6–12	21–69
2	HONG KONG, UK (I)	NOT AVAILABLE		21–69
3	USA (NTSC)	2–6	7–13	14–78

Controls and Connection Sockets

This gives a detailed explanation of the function of each button, switch and connection socket.





① **OPERATE**
For turning the VTR on and off.

② **EJECT**
To eject the cassette tape.

③ **Cassette Compartment**
Insert the video cassette here.

④ **Indicator Lamps**

⑤ **CLOCK SET**
For setting the time.

⑥ **TUNER PRESET**
To initiate TV station settings for the tuner.

⑦ **REW (REWIND)**

In the stop mode:	To rewind the tape.
In the playback mode:	To search backward.
In the rewind mode:	To obtain high speed picture.

"◁◁" is lit.

⑧ **PAUSE/STILL**

During playback:	Still picture.
During recording:	To interrupt recording.

⑨ **PLAY**
To start playback. "▷" is lit.

⑩ **FF (FAST FORWARD)**

In the stop mode:	To fast forward the tape.
In the playback mode:	To search forward.
In the fast forward mode:	To obtain high speed picture.

"▷▷" is lit.

⑪ **STOP**
To stop any playback or recording.

⑫ **KEY CONTROL (♭)**
To flat the key (lower a half-notes).

⑬ **ECHO Control**
Rotating the control clockwise increases the effect.

⑭ **KEY CONTROL (♮)**
To return to the standard key.

⑮ **MIC 1 Control**
Adjust the volume of the microphone 1.

⑯ **KEY CONTROL (♯)**
To sharp the key (raise a half-tone).

⑰ **MIC 2 Control**
Adjust the volume of the microphone 2.

⑱ **NOISE FILTER**

OFF:	For normal VTR operation.
ON:	For playback of a cassette whose recording quality is inferior.

⑲ **NICAM/MONO**

NICAM:	Normally set at this position.
MONO:	Only set at this position to record the normal sound during a NICAM broadcast or if the stereo sound is distorted due to inferior reception conditions.

⑳ **SYSTEM**

NTSC 3.58:	When dubbing NTSC 3.58 system.
NTSC 4.43:	When dubbing NTSC 4.43 system.
PAL/MESECAM:	When dubbing a PAL system.

㉑ **PAL/MESECAM**
Set according to the colour TV system used during recording and playback.
When the MESECAM indicator is lit, the MESECAM system is selected.

㉒ **AUDIO DUB /MIXING REC**
To set up the VTR for audio dubbing or mixing recording.
A. DUB indicator lights up.

㉓ **SIMUL**
While this switch is in the "Simul" position, the sound portion of the TV broadcast signal will be recorded only on the "normal" sound track. And the stereo sound signal received via the FM tuner will be recorded on the Hi-Fi sound tracks.

㉔ **Infra-red Remote Control Receiver Window**

㉕ **Display**

㉖ **CHECK/PROG**
To programme a number for timer recording.
Number "1, 2, 3... or 8" is lit.
Also to display details of preset timer recording.

㉗ **∨ ∧/– +**
To select the required programme position (TV station).
For setting the clock and timer recording.

㉘ **NEXT/SP/LP**
Go-on Button during setting procedure.
To select the tape speed required for recording.
SP gives the best picture quality.
LP gives the longest recording time.

㉙ **SHIFT/SLEEP**
For blanking unoccupied programme position.
For setting the time to turn VTR off automatically.

㉚ **REC**
To start a recording.

㉛ **KARAOKE**
ON: For Karaoke Playback.
OFF: For ordinary use of the VTR.

㉜ **VOCAL CUT/VOICE CHANGE**
VOCAL CUT:
For automatically reducing the volume of the vocal part of songs on a normal tape to use it as Karaoke tape.
VOICE CHANGE:
For the playback of Multi-Sound Karaoke tapes. Automatically suppressing the recorded vocal part on Multi-Sound tapes when singing along to the music.
OFF: For normal Karaoke playback.

㉝ **TIMER REC**
For activating the timer recording.
(Timer recording indicator ⏲ is lit.)

㉞ **MIC 1**
Connect a microphone 1 for Karaoke or recording.

㉟ **MIC 2**
Connect a microphone 2 for Karaoke or recording.

㊱ **RF OUT**
Connect to the aerial terminal on a TV set.

㊲ **RF Selector**
To select the colour TV system used by the TV set to be connected.

B.G.H:	PAL B.G.H
I:	PAL I
D.K.K1:	PAL D/SECAM K.K1

㊳ **AUDIO IN**
Connect the audio cable to a video camera or another video recorder.

㊴ **VIDEO IN**
Connect the video cable to a video camera or another video recorder.

㊵ **AUDIO OUT**
Connect the audio cable to a TV or another video recorder.

㊶ **VIDEO OUT**
Connect the video cable to a TV or another video recorder.

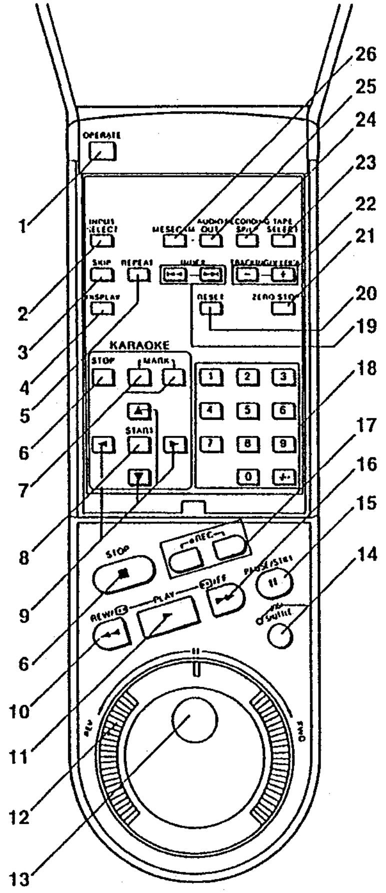
㊷ **RF IN**
Connect to the external aerial.

㊸ **CH ADJ.**
To adjust the RF transmitting channel E32~40 (C24~27).

㊹ **SIGNAL GROUND TERMINAL**
Connect the Signal Ground Terminal to the ground to reduce the noise from microphone cable, during *karaoke*.

㊺ **AC IN~**
Connect to mains.

Infra-Red Remote Controller



1 **OPERATE**
For turning the VTR on and off.

2 **INPUT SELECT**
To select the "A1" external recording source.

3 **SKIP**
To start cue playback in 30 seconds interval during playback.
- Each time SKIP is pressed, you can set 30, 60, 90 and 120 seconds.

4 **DISPLAY**
To change the indication on the VTR Display.

→ Clock→Counter→Remaining Tape Time

5 **REPEAT**
For the Repeat Playback function.

6 **STOP**
To stop any playback or recording.

7 **MARK**
For recording a soundless portion.

8 **START**
To search for a desired tune for Karaoke playback.

9 **▲/▼/◀/▶**
For selecting a desired tune or performing other types of selection from the On-Screen Display.

10 **REW (REWIND)**

In the stop mode:	To rewind the tape.
In the playback mode:	To search backward.
In the rewind mode:	To obtain high speed picture.

"◁◁" is lit.

11 **PLAY**
To start playback. "▷" is lit.

12 **SHUTTLE RING**
To adjust the playback speed step by step in both forward and reverse directions.

13 **JOG DIAL**
To locate any desired frame with utmost precision.

14 **JOG/SHUTTLE (with Indicator)**
To switch over to the jog and the shuttle operation.

15 **PAUSE/STILL**

During playback:	Still picture.
During recording:	To interrupt recording.

16 **FF (FAST FORWARD)**

In the stop mode:	To fast forward the tape.
In the playback mode:	To search forward.
In the fast forward mode:	To obtain high speed picture.

"▷▷" is lit.

17 **REC**
To start a recording.

18 **PROGRAMME POSITION SELECTOR BUTTONS**
- for selecting the programme positions.

9: $\boxed{9}$

19: $\boxed{\text{-/--}}$ → $\boxed{1}$ → $\boxed{9}$

- for programme of timer recording.

19 **INDEX**
For the index search function.

20 **RESET**
To reset the tape counter (elapsed time) to "0:00.00".
- The Tape Counter is automatically reset to "0:00.00" when the video cassette is inserted.

21 **ZERO STOP**
For the ZERO STOP function.

22 **TRACKING/V-LOCK**
These buttons are used:
For manual tracking adjustment
The + and − buttons are used to adjust the tracking when, for example, noise bars on the picture are better removed manually than by the automatic digital tracking control. After making a manual adjustment, press both buttons together to return to automatic digital tracking control.

For slow tracking adjustment
When noise bars appear during Super Still, Super Still Advance or Super Fine Slow playback, switch over to slow playback and adjust with the "+" or "−" Button to reduce the noise bars.

For vertical locking adjustment
Use the + and − buttons to minimize any vertical jitter during still-picture playback.

23 **TAPE SELECT**
Set according to the cassette tape length in order to obtain correct indication of the remaining tape time.

E195:	For E30, -60, -80, -120, -180 and -195 tapes.
E240:	For E240 tape.
E260:	For E260 tape.

24 **RECORDING SP/LP**
To select the tape speed required for recording.
SP gives the best picture quality.
LP gives the longest recording time.

25 **AUDIO OUT**
To select the desired sound mode.
At the every push of this button, the audio output mode changes as follows.

→ Stereo→Left→Right→Normal audio track

and the Left and Right Indicators show which sound mode is selected in the following way.

Stereo:	Both the Left and Right Indicators are lit.
Left:	The Left Indicator is lit.
Right:	The Right Indicator is lit.
Normal:	Both the Left and Right Indicators are not lit.

26 **MESECAM**
Set according to the colour TV system used during recording and playback.
When the MESECAM Indicator is lit, the MESECAM system is selected.

Power source for the remote controller

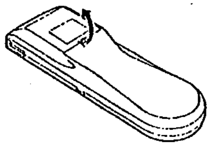
The Remote Controller is powered by 3 "UM3" or "R6" size batteries.
The life of the batteries is about one year, although this depends on the frequency of use.

Precautions for battery replacement

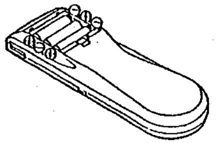
- Load the new batteries with their polarity (+ and −) aligned correctly.
- Do not apply heat to the batteries, or an internal short-circuit may occur.
- If you do not intend to use the remote controller for a long period of time, remove the batteries and store them in a cool and dry place.
- Remove spent batteries immediately and dispose of them.
- Do not use an old and a new battery together, and never use an alkaline battery with a manganese battery.

Loading the batteries

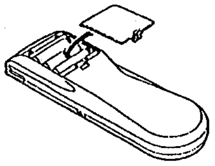
1 Remove the battery compartment lid.



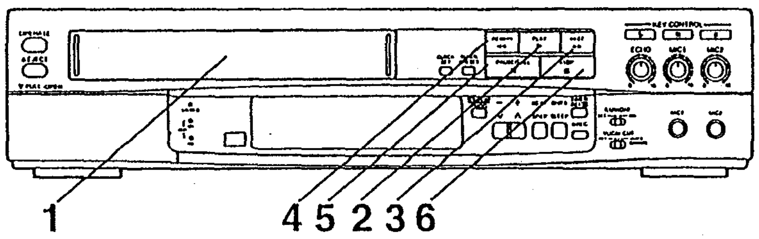
2 Place the batteries in the battery compartment according to the polarity indicated inside the battery compartment.

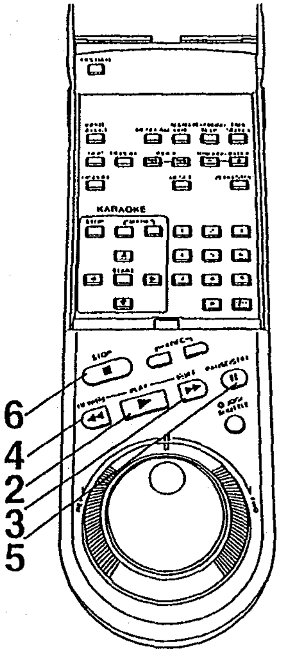


3 Replace the lid.



Playback





Operations **Display Symbols**

1

Insert a recorded cassette tape.
- If it has already been inserted, press OPERATE to turn the unit on.

2 Start viewing the picture.

3 Search forward by tapping FF.
- To change back to normal playback, press PLAY.

4 Search backward by tapping REW.
- To change back to normal playback, press PLAY.

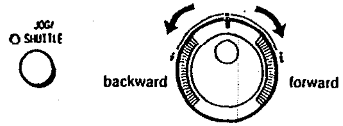
5 View a still picture.
- To continue the normal playback, press PLAY or PAUSE/STILL again.

6 To stop viewing the picture.

Other playback functions

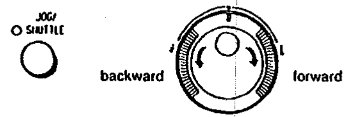
To change the playback speed

Using Shuttle Ring:
1 Press JOG/SHUTTLE.
2 Rotate Shuttle ring.



To locate the desired picture exactly

1 Press JOG/SHUTTLE.
2 Turn Jog dial.



To obtain high speed picture during fast forward or rewind

Keep FF pressed during fast forward.
Keep REW pressed during rewind.

Note:
Cue, review or slow playback will be automatically released after 10 minutes, and still playback after 5 minutes.

To skip scene

Press SKIP during playback.

- The following 30 seconds will be skipped.
- Each press gives a 30 seconds time span up to 4 minutes.

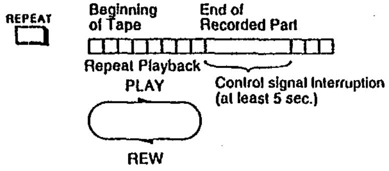
To return to a specified scene

1 Press RESET to set the counter to 0:00.00.
2 After playback, press ZERO STOP in the stop mode.

- The tape will be rewound or fast forwarded to 0:00.00.

To playback the recorded part repeatedly

Press REPEAT in the stop mode.



To find the beginning of each recording

For example:
Searching for the 2nd recorded segment in the forward direction.

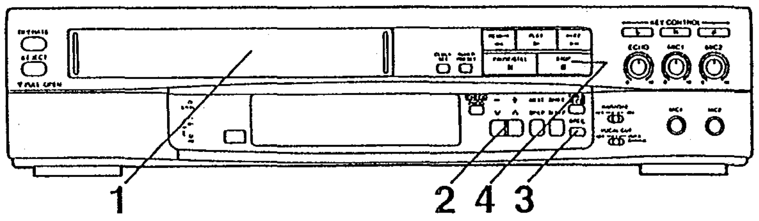
Press INDEX ▶▶I twice.

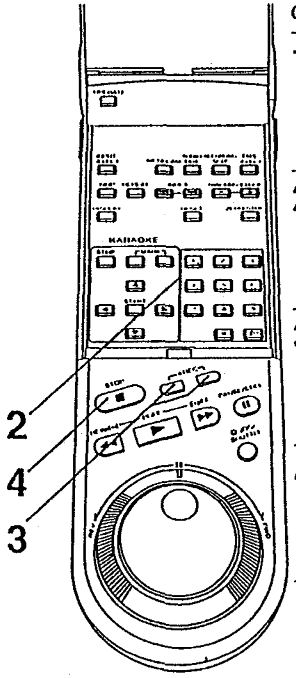
- After finding the specific recorded segment, playback starts automatically.
- For the reverse direction, press INDEX I◀◀.
- Up to 20 index signals can be searched for in both directions.

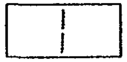
Recording Index Signals
Index signals are recorded in following cases.
WRITE indicator appears on the Display.
- When a recording is started by pressing REC.
- When REC is pressed during recording.
- When timer recording is activated.

Note:
The search function can only work correctly, if the index signals are spaced at least 3 minutes apart in the SP mode and 5 minutes apart in the LP mode.

On-the-spot Recording





	Operations	Display Symbols	
1			Insert a cassette tape. • If it has already been inserted, press **OPERATE** to turn the VTR on.
2	− + ∨ ∧		Select TV station.
3	●REC		Start recording.
4	STOP ■		Stop recording.

To select the desired tape speed

Press SP/LP before recording.

SP/LP

To interrupt recording

Press PAUSE/STILL during recording.
Press again to continue recording.

PAUSE/STILL ‖

To record one TV programme while viewing another programme

1 Refer to the on-the-spot recording operations steps 1 to 4.

2 Select the TV programme on your TV set you wish to view at the present time.

To display the approximate remaining tape time

1 Press TAPE SELECT to select the corresponding cassette tape length.

TAPE SELECT

E195

2 Press DISPLAY.

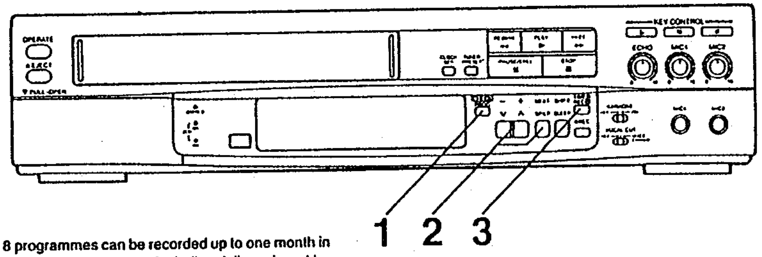
DISPLAY

1:05

E195: For E30, -60, -80, -120, -180 and -195 tapes.
E240: For E240 tape.
E260: For E260 tape.

Notes:
- Set SYSTEM according to the colour TV system.
  NTSC 3.58: When receiving NTSC 3.58 signals.
  NTSC 4.43: When receiving NTSC 4.43 signals.
  PAL/MESECAM: When receiving PAL or SECAM signals.
- When a video cassette with a broken off tab is inserted, the "▭" indication will flash to indicate that recording is not possible.
- The recording pause mode will be automatically released after 5 minutes.

Timer Recording



Up to 8 programmes can be recorded up to one month in advance by setting the timer, including daily and weekly programmes.

Preparation

Insert a cassette tape with an intact erasure prevention tab.

For Example:

Programme number;	1
Programme position (channel);	2
Date;	27th, October
Starting time;	20:02
Ending time;	21:30
(present date; 16th October)	

Operations		Display Symbols	
1	CHECK PROG	PROG 1	Select the **Programme number** "1".
2	Set each items by pressing + or – and NEXT.		
	– +	2	Set the **Programme position** (channel) "2".
		27	Set the **Date** "27". •For daily and weekly recording, see page 19.
	⬇	20 15	Set the **Starting time** (hour) "20".
		ON 20 02	Set the **Starting time** (minute) "02".
	NEXT SP/LP	OFF 21 02	Set the **Ending time** (hour) "21".
		OFF 21 30	Set the **Ending time** (minute) "30". •There is no need to press NEXT.
3	TIMER REC◷	◷	To activate timer recording, press **TIMER REC**.

Setting for Daily and Weekly Timer Recording

In the Date setting step, press – repeatedly until the desired day(days) is displayed.

Daily recording From Sunday to Saturday	SU MO TU WE TH FR SA
From Monday to Saturday	MO TU WE TH FR SA
From Monday to Friday	MO TU WE TH FR
Weekly recording For example, Sunday	SU

Timer Recording from External Signal Source

If Timer Recording is performed by a unit connected to the Audio/Video Input sockets, select the A1 Indicator for the programme position.

Selecting the Desired Tape Speed

After step 2, press NEXT and select SP or LP by pressing + or –.

Setting other Programmes in Succession

Repeat steps 1 and 2.

Checking a Timer Programme

Select the timer programme number to be checked by pressing CHECK/PROG.

Cancelling a Timer Programme

1 Release from the standby mode by pressing TIMER REC.

2 Select the timer programme number to be canceled by pressing CHECK/PROG.

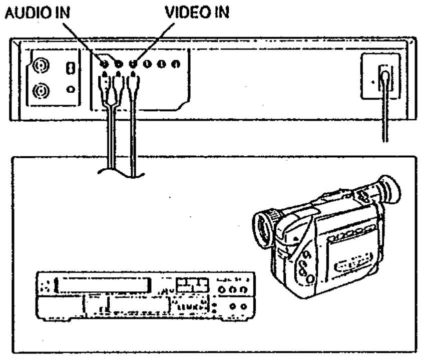
3 Press + and – simultaneously for more than 3 seconds.

Editing

Assembly Editing

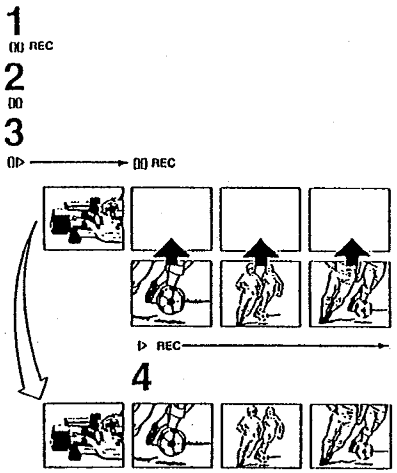
This function can be used to make up an edited tape from other recordings or video sources.

This enables you to record a new segment immediately after a previously recorded segment.



Preparation

- Connect a Movie Camera or another VTR to this VTR as shown.
- Insert a recorded cassette tape with an intact erasure prevention tab.
- Select the video source required by pressing INPUT SELECT to set A1.



Operations

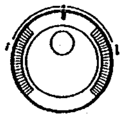
1 Put the VTR in the recording pause mode.

●REC ▭ PAUSE/STILL II

2 Press JOG/SHUTTLE.

JOG/SHUTTLE ○

3 Search for the end of the previously recorded segment.



4 Start the new recording by pressing PAUSE/STILL again.

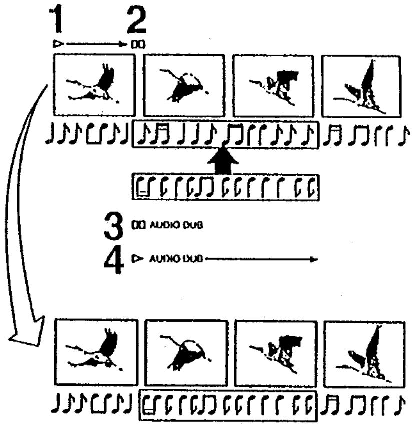
PAUSE/STILL II

Audio Dubbing

This enables you to record new sound on a previously recorded tape.

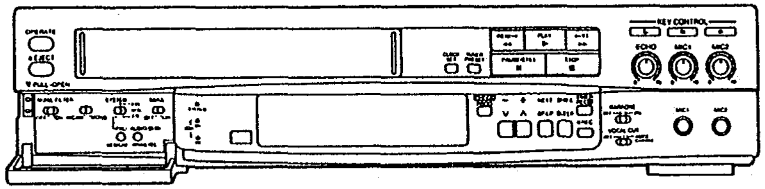
Preparation

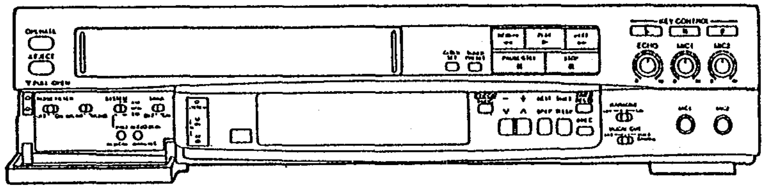
- Insert a recorded cassette with an intact erasure prevention tab.
- Select the video source required by pressing INPUT SELECT to set A1.



Operations		Display Symbols	
1	PLAY ▶	▷	Search for the starting point for Audio Dubbing.
2	PAUSE/STILL II	II	Press **PAUSE/STILL** at the starting point.
3	AUDIO DUB/ ○ MIXING REC	II	Set for audio dubbing by pressing **AUDIO DUB**.
4	PAUSE/STILL II	▷	Start recording the new sound by pressing **PAUSE/STILL**. Stop recording by pressing **STOP**.

Other Functions





Automatic VTR off at setting time

Press **SLEEP** for the desired time.

SLEEP
OFF
0:30

- Each press gives a 30 minutes time span up to 9 hours.
- To cancel the setting time, press **SLEEP** repeatedly to set *0:00*.

NTSC Playback

Tapes recorded in the NTSC system can be played back with this VTR.

A note about NTSC playback on PAL TV function
On some TVs, the playback picture may roll up or down: adjust this using the V-HOLD control cannot correct this condition. The playback picture will shrink vertically, and black bars will appear both on the top and bottom of the screen. This is not an indication of a malfunction.

- During Cue, Review, Still or Slow playback, the picture may not be in colour.
- Recording in the NTSC system is not possible with this VTR.
- This function is designed only to allow the playback of tapes recorded by NTSC signals on a PAL system TV. The NTSC signal is not completely converted to a PAL signal. For this reason, images played back by this function cannot be recorded on another VTR.
- When playing back a tape recorded in the NTSC system SLP mode, the "LP" indication will light up in the Display.

Automatic function

Automatic playback

When a cassette without an erasure prevention tab is inserted, the VTR starts playback automatically.

VTR-off playback

When the VTR is off, an inserted cassette can be played back by pressing **PLAY**.

Automatic rewinding

When the tape reaches its end during recording (except for timer recording) or playback, it will automatically be rewound to the beginning.

Automatic switching off and ejection

When the VTR is switched off, an inserted cassette can be ejected simply by pressing **EJECT**. The VTR will eject the cassette and automatically turn itself off again.

Recording of Simulcast Sound Set SIMUL to ON

While this switch is in the "Simul" position, the sound portion of the TV broadcast signal will be recorded only on the "normal" sound track. And the stereo sound signal received via the FM tuner will be recorded on the Hi-Fi sound tracks.

The NICAM Broadcast System

NICAM is a 2 Channel sound broadcast system to provide either a high quality stereo sound track or 2 independent MONO sound tracks, M1 and M2.

NICAM programmes are always accompanied by standard sound broadcasts and you can select the desired sound with NICAM/MONO (when recording) or with AUDIO OUT (when playback).

The NICAM digital stereo sound can only be recorded on the Hi-Fi audio track.

When a stereo, dual-soundtrack or mono NICAM programme is being received, the indicators are lit to inform you of the type of broadcast.

Reception of a NICAM Stereo Broadcast

When the STEREO indicator is lit, set NICAM/MONO to NICAM to be able to record on the Hi-Fi sound track in stereo.
The Audio cable must also be connected to a stereo TV in order to hear the NICAM sound in stereo.

Reception of a NICAM Dual-Sound Broadcast

When the M1 and M2 indicators are lit, set NICAM/MONO to NICAM if you want to record both channels on the Hi-Fi sound track. M1 is the left-hand channel and M2 is the right-hand channel.

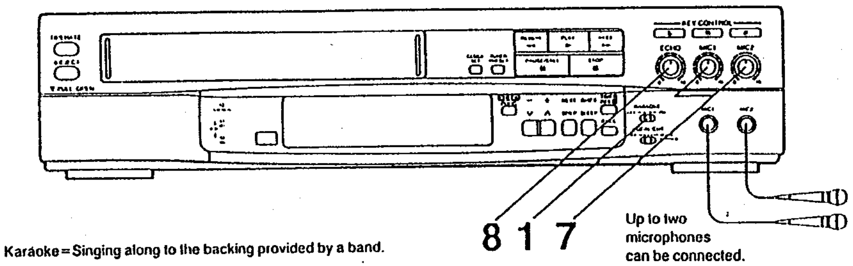
Reception of a NICAM Monaural Broadcast

When a NICAM monaural broadcast is being received, only the M1 indicator is lit. To hear such a signal on both channels and to record it on both channels of the Hi-Fi track, set NICAM/MONO to NICAM.

- To record the regular sound (ordinary normal sound) on the FM audio tracks when a NICAM programme is received, set NICAM/MONO to MONO.

Important Note for the NICAM System:
When this VTR tuner is switched on, it will automatically switch to a NICAM broadcast, if NICAM is being transmitted. During test transmissions, it is possible that the sound received doesn't correspond to the picture being viewed. In order to receive a synchronized sound and picture, select monaural sound with either AUDIO OUT or with NICAM/MONO. This will only apply until NICAM transmissions are fully operational.
At this time the NICAM signal is transmitted on stereo channels only, since the M1 and M2 formats are not yet available. Even if the soundtrack is in MONO the stereo indicator will remain illuminated.

Karaoke Playback

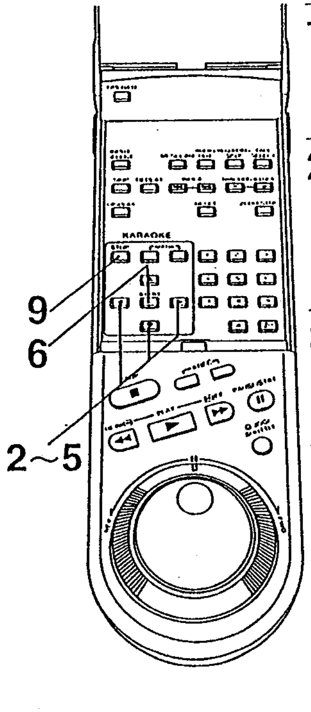


Up to two microphones can be connected.

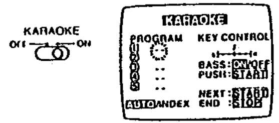
Karaoke=Singing along to the backing provided by a band.

Preparation

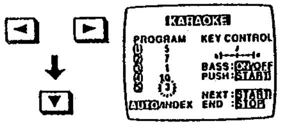
- Insert a Karaoke video cassette.
- Connect a microphone to the Microphone Socket on the VTR.



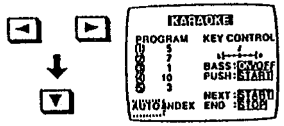
Operations On-Screen Display



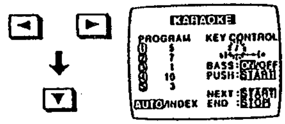
1 Set KARAOKE to ON.
The On-Screen Display shows the Karaoke Selection Mode.



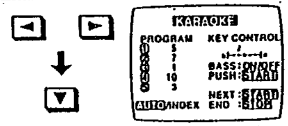
2 Select the number of a desired tune.
- Additional tunes (up to a total of 5) can be selected.
- To correct a selected tune number, use ▲, ▼, ◀ or ▶.
- Press ▼ one more time after selecting the desired tune(s).



3 Select the desired search mode.
AUTO: Search with muted sound
INDEX: Search for index signals

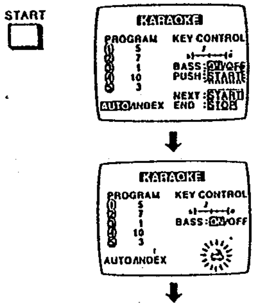


4 Adjust the key of the music on the tape as desired.
- After playback of one tune, the key will automatically be reset to the standard setting.



5 Select the desired bass mode.
ON: Normal sound reproduction
OFF: The bass sound are emphasized

Operations On-Screen Display



6 To search for a desired tune, press START.
- As soon as the desired tune has been found, Karaoke playback starts.

Karaoke Playback On-Screen Display

7 Adjust the sound volume of the Microphone to the proper volume while singing.

8 Adjust the echo effect to your taste while singing.
- It is possible to apply the echo effect to the sound from both Microphone 1 and 2 at the same time.

9 Press STOP to stop Karaoke playback.

When no operation is performed during more than 5 minutes after step 1, the On-Screen Display changes to the Demonstration Mode.

Panasonic
KARAOKE

- To return to the original Karaoke Selection Mode, press ▲, ▼, ◀, ▶ or START.

Notes:
- Depending on the tape used, the Tune Search function may not work correctly.
- If the volume is too high, the sound from the speaker may become distorted.
- If acoustic feedback (howling) occurs, turn the microphone volume down, use the microphone farther away from the speakers, hold the microphone so that it is not pointed toward the speakers, or turn the volume of the TV set down.
(If the sound is produced through a stereo amplifier, turn the volume of the stereo amplifier down.)
- When the VTR is in the Karaoke mode, normal recording is not possible.

Making Karaoke Tapes

Controlling the Key during Karaoke Playback

To sharp the key (raise a half-tone):
Press KEY CONTROL (♯).
- The key can be raised by up to 3 half-notes.

♯

To flat the key (lower a half-notes):
Press KEY CONTROL (♭).
- The key can be lowered by up to 3 half-notes.

♭

To return to the standard key:
Press KEY CONTROL (♮).

♮

Note:
If the key is made sharp or flat during the playback of a stereophonic recording, the sound changes to a monaural playback.

Automatically Reducing the Volume of the Vocal Part of Songs on a Normal Tape to Use It as Karaoke Tape (Vocal Cut)

Set VOCAL CUT/VOICE CHANGE to VOCAL CUT.

VOCAL CUT
OFF VOICE CHANGE

Playback of Multi-Sound Karaoke Tapes

Automatically Suppressing the Recorded Vocal Part on Multi-Sound Tapes When Singing along to the Music (Voice Change)

Set VOCAL CUT/VOICE CHANGE to VOICE CHANGE.

VOCAL CUT
OFF VOICE CHANGE

- If it becomes difficult to match your vocal performance to the tempo of the tune, the Karaoke Player will automatically switch over to the recorded voice of the singer on the tape.
- Use this function for a duet with sing alone.

Mixing recording

While singing, it is possible to record the musical accompaniment together with your voice. Note that the original sound on the "normal" (mono) sound track will be completely erased during mixing recording.

Preparation
- Insert a Hi-Fi Karaoke video cassette with the erasure prevention tab intact.
- Connect a microphone to the Microphone Socket on the VTR.
- Set KARAOKE to ON.

1 Press PLAY to look for the point where you want to start the mixing recording.

2 Press PAUSE/STILL at the exact point where you want to start the mixing recording.

3 Press AUDIO DUB/MIXING REC.
(The "A. DUB" indicator will light up.)

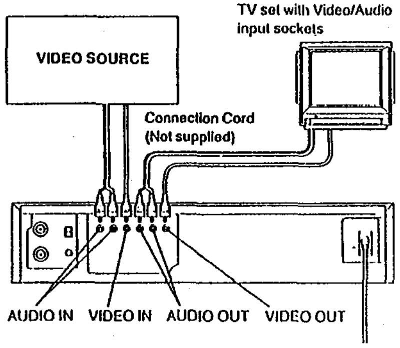
4 When you are ready to start singing, press the PAUSE/STILL once again to release the tape from pause. The mixing recording will start.

5 Press STOP to stop the mixing recording.

Notes:
- Sound recorded by using the mixing recording function is recorded on the "normal" audio track (always in mono).
- If a Karaoke tape with recorded normal (mono) sound only is used, the musical accompaniment recorded on it will be erased if mixing recording is performed on it.
- If the erasure prevention tab of the cassette is missing, no mixing recording can be made.
- If mixing recording is performed on a tape recorded in the NTSC system, the mixing recording function will not work correctly.

Preparation

- Make the necessary connections as shown in the connection diagram.
- Select the video source required by pressing INPUT SELECT to set A1.
- Set SYSTEM to "PAL/MESECAM", "4.43" or "3.58" according to the colour TV system of the video source.
- Insert a blank video cassette with an intact erasure prevention tab.

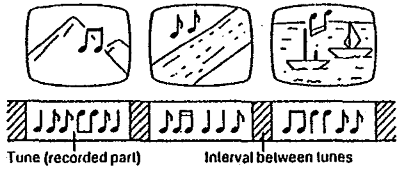


Operations

Operations	Display Symbols	
1 ●REC PAUSE/STILL ⏸		Put the VTR in the recording pause mode by pressing REC and PAUSE/STILL.
2 PAUSE/STILL ⏸		Start the new recording by pressing PAUSE/STILL again

Cautions for Making Karaoke Tapes

When making karaoke tapes, be sure to adhere to the following points:



1 Select the SP mode on the VTR for recording.

2 Make sure that the length of the intervals between tunes (soundless parts) is more than 6 seconds.
- Make sure that the noise level of these parts is kept to an absolute minimum.

3 Record a soundless portion of more than 10 seconds at the beginning of the tape.

4 Record only tunes with a length of more than 40 seconds.

5 When making Karaoke tapes, use the PAUSE/STILL for editing.
- This minimizes noise at the points where successive recordings are joined.

Recording a Soundless Portion

During normal playback or in the still playback mode, press MARK.

MARK

- The muted part is formed for approx. 5 seconds in the SP mode.

SECTION 2
ADJUSTMENT PROCEDURES

2-1. DISASSEMBLY METHOD

2-1-1: DISASSEMBLY FLOW CHART

This flow chart indicates disassembly steps of the cabinet parts and the circuit boards in order to find the necessary items for servicing. When reassembling, perform the steps in the reverse order.

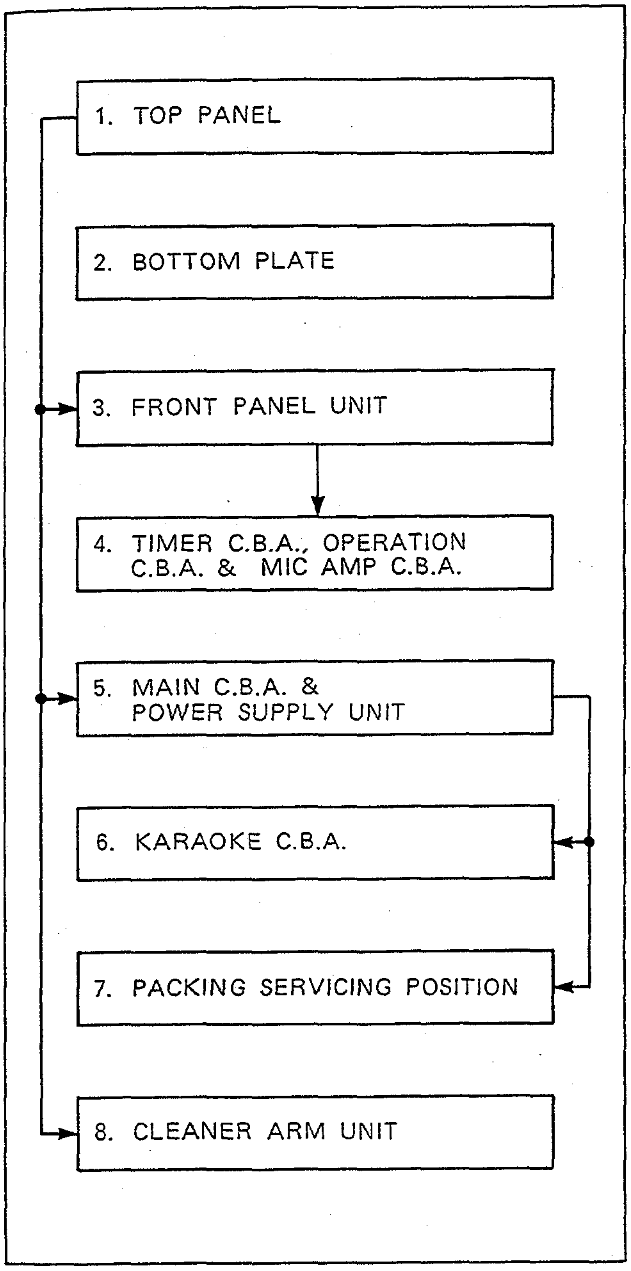

1. TOP PANEL
2. BOTTOM PLATE
3. FRONT PANEL UNIT
4. TIMER C.B.A., OPERATION C.B.A. & MIC AMP C.B.A.
5. MAIN C.B.A. & POWER SUPPLY UNIT
6. KARAOKE C.B.A.
7. PACKING SERVICING POSITION
8. CLEANER ARM UNIT

Fig. D1

2-1-2. DETAIL OF DISASSEMBLY METHOD

1. REMOVAL OF THE TOP PANEL

Remove.....4 Screws(A)

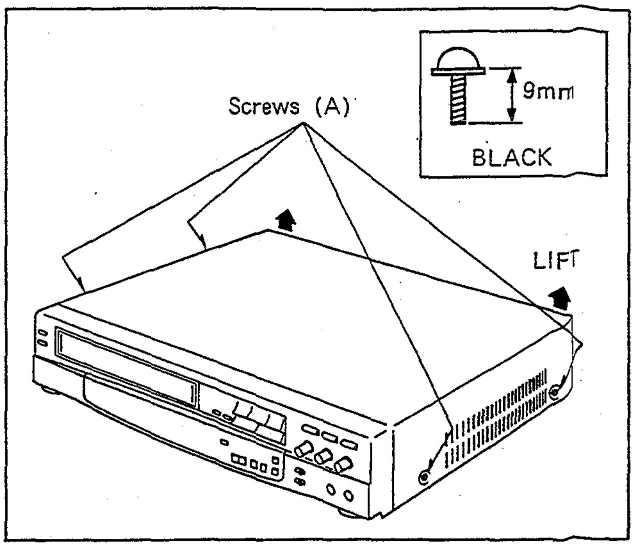

Screws (A)
9mm
BLACK
LIFT

Fig. D2

2. REMOVAL OF THE BOTTOM PLATE

Remove.....6 Screws(B)

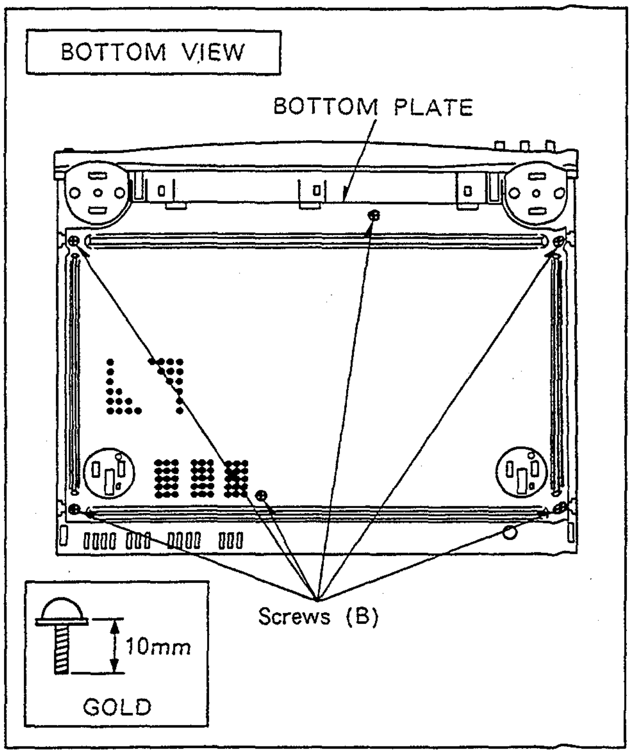

BOTTOM VIEW
BOTTOM PLATE
Screws (B)
10mm
GOLD

Fig. D3

3. REMOVAL OF THE FRONT PANEL UNIT

Unlock.....8 Tabs(C)

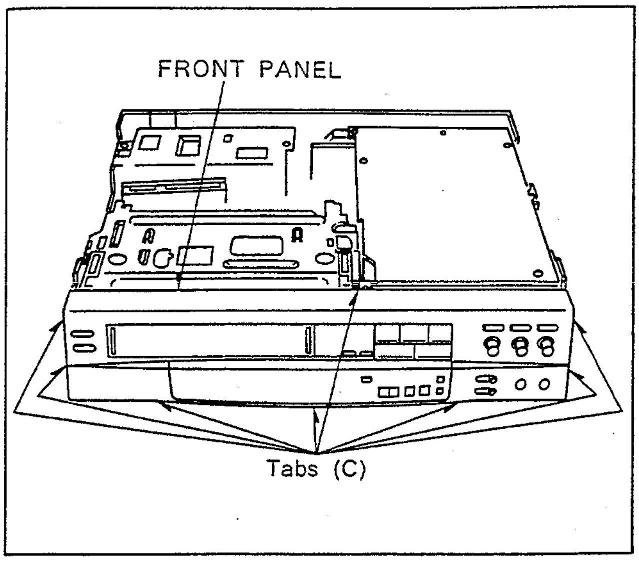

FRONT PANEL
Tabs (C)

Fig. D4

4. REMOVAL OF THE TIMER C.B.A., THE OPERATION C.B.A. & THE MIC AMP C.B.A.

REMOVAL OF THE TIMER C.B.A. & THE OPERATION C.B.A.

Unlock.....8 Tabs(D)

REMOVAL OF THE MIC AMP C.B.A.

Remove.....2 Screws(E)

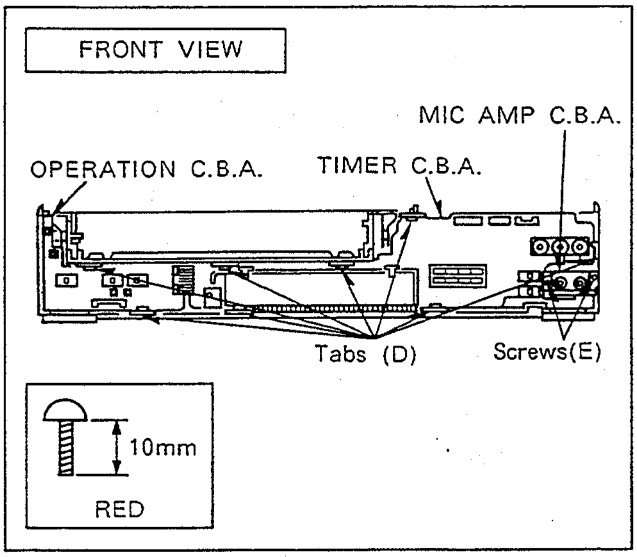

FRONT VIEW
MIC AMP C.B.A.
OPERATION C.B.A.
TIMER C.B.A.
Tabs (D)
Screws(E)
10mm
RED

Fig. D5

5. REMOVAL OF THE MAIN C.B.A. & THE POWER SUPPLY UNIT

REMOVAL OF THE MAIN C.B.A.

Remove.....3 Screws(F)
Remove.....2 Screws(G)
Unlock.....Tab(H)

REMOVAL OF THE POWER SUPPLY UNIT

Remove.....2 Screws(I)
Remove.....Screw(J)

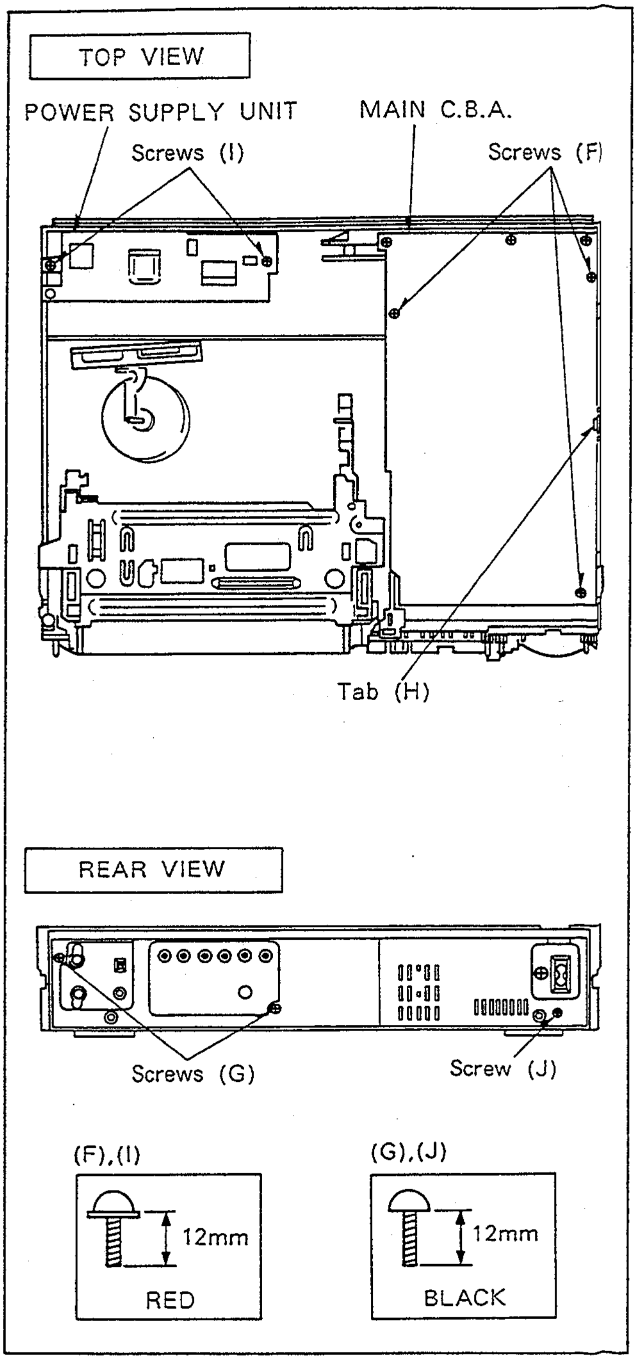

TOP VIEW
POWER SUPPLY UNIT
MAIN C.B.A.
Screws (I)
Screws (F)
Tab (H)
REAR VIEW
Screws (G)
Screw (J)
(F),(I)
12mm
RED
(G),(J)
12mm
BLACK

Fig. D6

6. REMOVAL OF THE KARAOKE C.B.A.

Remove.....Screw(K)
Unlock.....Tab(L)

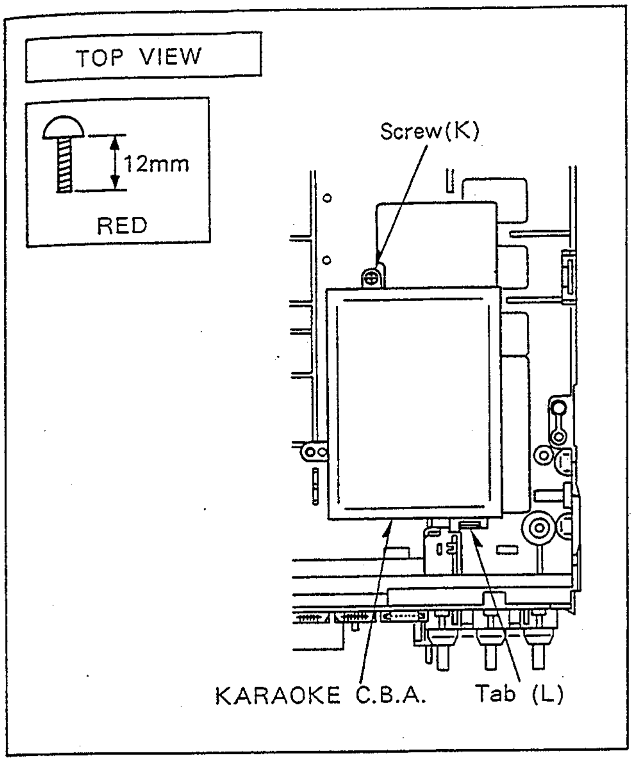

TOP VIEW
12mm
RED
Screw(K)
KARAOKE C.B.A.
Tab (L)

Fig. D7

7. PACK SERVICING POSITION

CAUTION:
Confirm the isolation between Mechanical Chassis and Main C.B.A. before connecting Main AC.

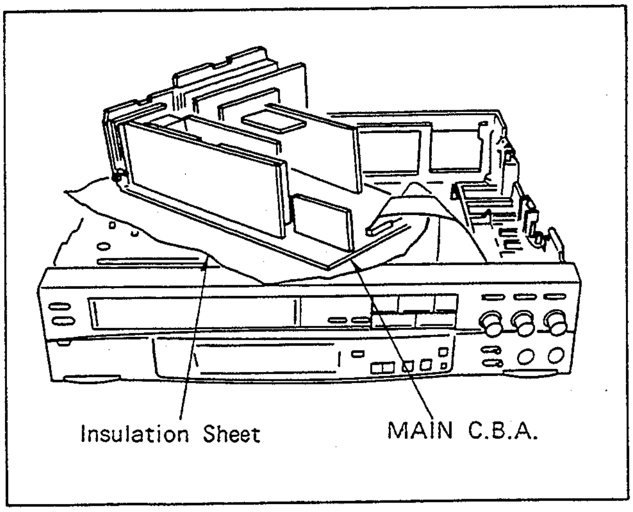

Insulation Sheet
MAIN C.B.A.

Fig. D8

8. REMOVAL OF THE CLEANER ARM UNIT

1. Unlock the locking portion(M).
2. Pull up the Cleaner Arm Unit.

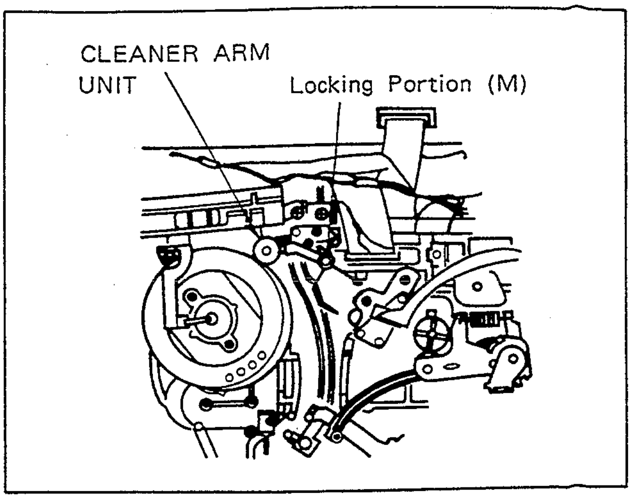

CLEANER ARM UNIT
Locking Portion (M)

Fig. D9

2-2. SERVICE INFORMATION

2-2-1. REMOVAL OF THE CASSETTE

If the electrical circuit is defective and the action of unloading and front unloading do not work properly, it is possible to remove the cassette manually. There are 2 methods of removing the cassette.

1. HAND OPERATION

1) Remove the bottom plate.
2) Turn the WORM GEAR to "A" arrow mark direction by finger as shown in Fig. S1, moving the LOADING POST to the unloaded position.
3) Turn the CAPSTAN clockwise to take up the tape.
4) Turn the WORM GEAR again to eject the cassette.

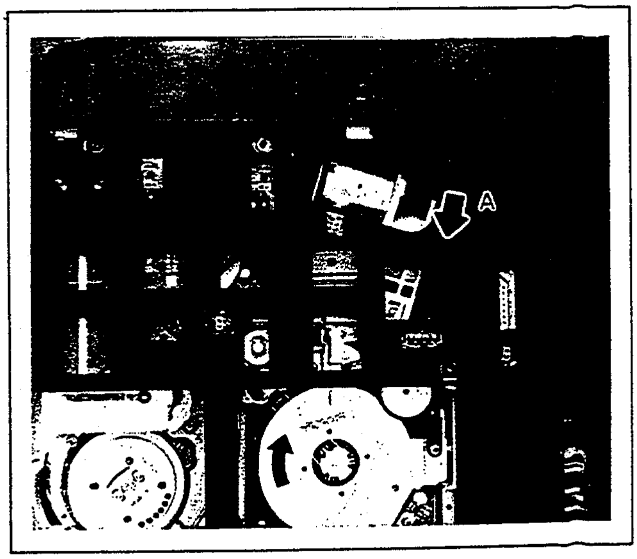


Fig. S1

2. BATTERY OPERATION

1) Connect the battery to P1503 as shown in Fig.S2.
2) After moving the LOADING POST to the unloaded position, disconnect the battery to stop the motor.
3) Turn the CAPSTAN to clockwise to take up the tape.
4) Reconnect the battery to eject the cassette.

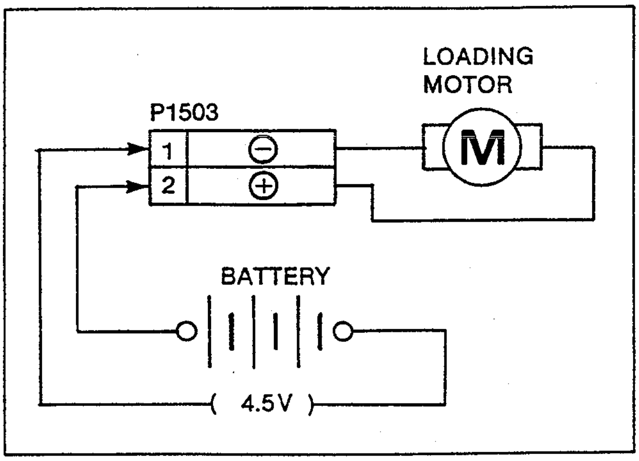


Fig. S2

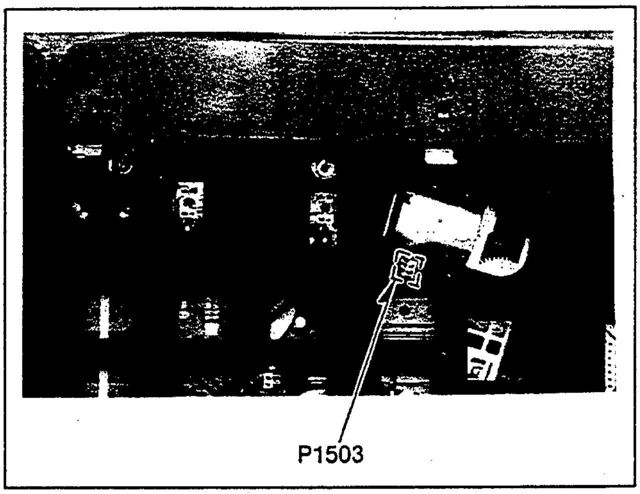


Fig. S3

2-3. MECHANICAL ADJUSTMENT PROCEDURES

2-3-1. TENSION POST POSITION ADJUSTMENT

(Equipment Required)
Hex Wrench (VFK0326)

1. Disconnect the AC plug.
2. Remove the TOP PLATE and CASSETTE HOLDER.
3. Turn the LOADING MOTOR until the loading is complete.
4. Adjust the hole of TENSION BAND FASTENER by hex wrench so that the left edge of IMPEDANCE ROLLER and TENSION ARM UNIT are as shown in Fig.M1.

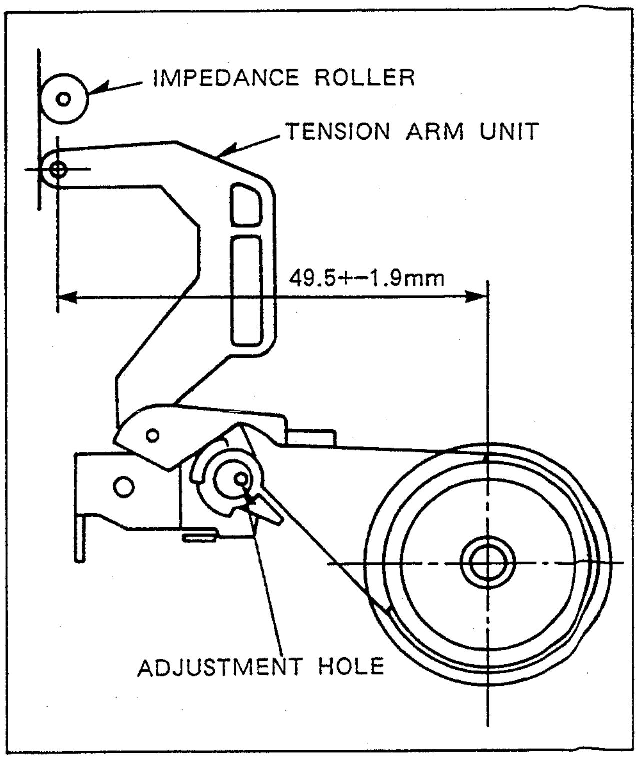


Fig. M1

2-3-2. BACK TENSION ADJUSTMENT

(Equipment Required)
Back Tension Meter (VFK0132)
VHS Cassette Tape (180 minutes tape:PAL)
(120 minutes tape:NTSC)

(Specification)
22.5-27.5g

1. Playback the cassette tape from the beginning and wait until the tape movement is (approx. 10-20 seconds)
2. Insert the back tension meter into the path of a tape, and check that the back tension is within specification as shown in Fig.M2.

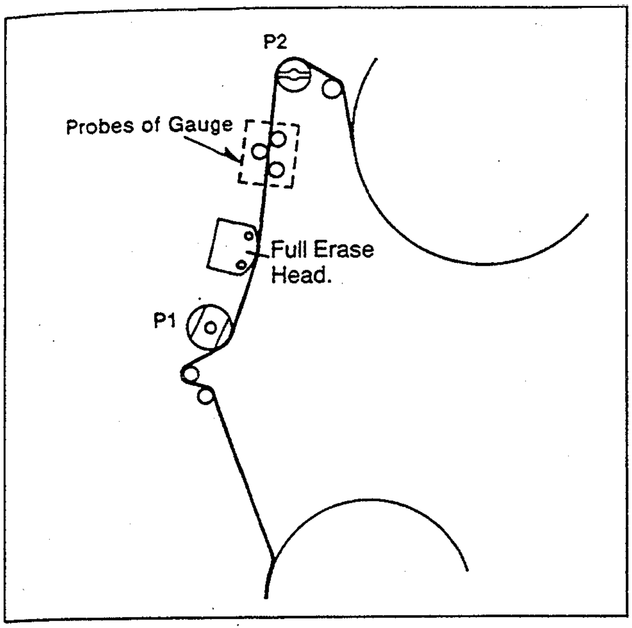

P2
Probes of Gauge
Full Erase Head.
P1

Fig. M2

3. If it is out of specification, change the spring notch as shown in Fig.M3.

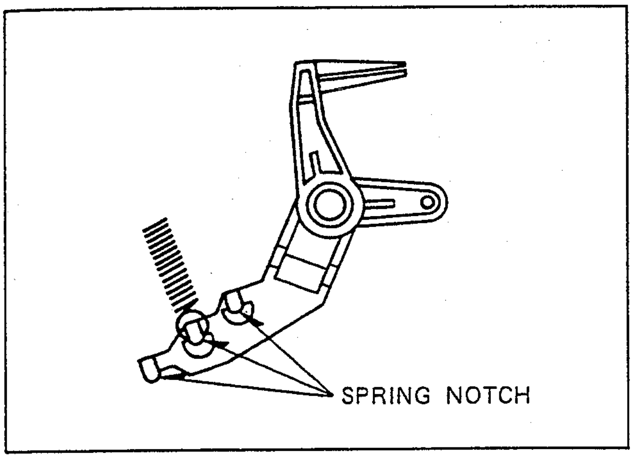
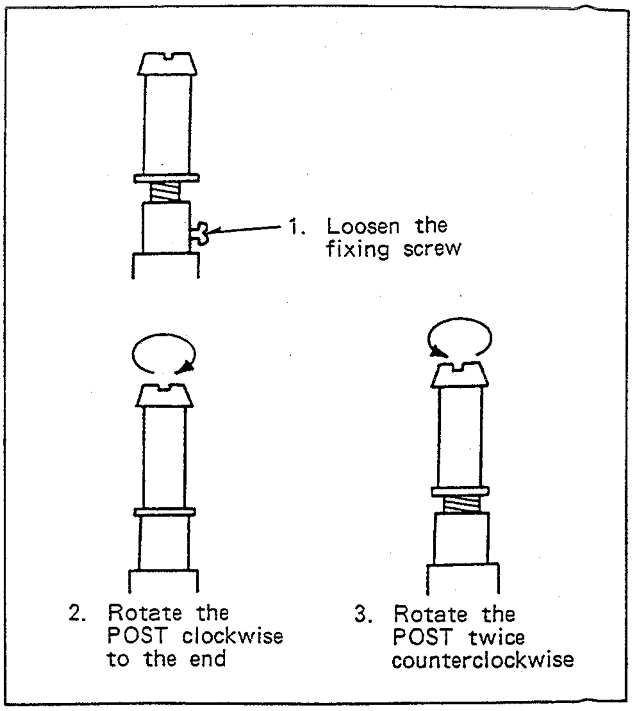

SPRING NOTCH

Fig. M3

2–3–3. P2 AND P3 POSTS ADJUSTMENT (PREADJUSTMENT)

(Equipment Required)
Post Adjustment Screwdriver (VFK0329)

1. Remove the TOP PLATE and CASSETTE HOLDER.
2. Turn the LOADING MOTOR until the unloading is complete.
3. Loosen the fixing screw of P2 and P3 Posts.
4. Screw the P2 and P3 Posts clockwise all the way in.
5. Unscrew the P2 and P3 Posts two revolutions counterclockwise.



1. Loosen the fixing screw

2. Rotate the POST clockwise to the end

3. Rotate the POST twice counterclockwise

Fig. M4

6. Install the TOP PLATE and CASSETTE HOLDER
7. Playback the cassette tape and make sure that the edges of the tape are not curling at the bottom or top end of the P1, P2, P3 and P4 POSTS as shown in Fig.M5.

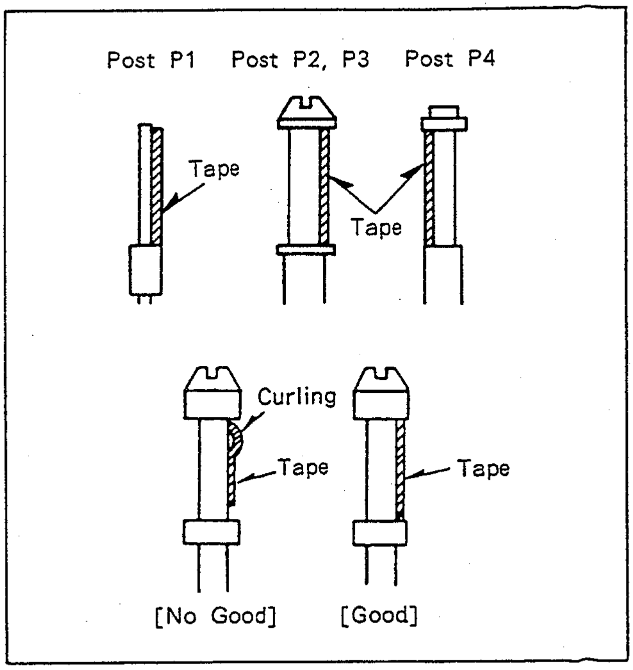

Post P1
Post P2, P3
Post P4
Tape
Tape
Curling
Tape
Tape
[No Good]
[Good]

Fig. M5

8. If curling appears, readjusts the P2 and P3 POSTS.

2-3-4. TAPE INTERCHANGEABILITY ADJUSTMENT

(1) Adjustment of P2 and P3 Posts.
(2) Height Adjustment of A/C Head (1).
(3) Height Adjustment of A/C Head (2).
(4) Fine-Adjustment of A/C Head
(5) Horizontal Position Adjustment of A/C Head.

If the Tape Interchangeability Adjustment is not perfect, repeat the above procedures from (1) to (5).

CAUTION:
To create an adjustment mode for to make the Tape Interchangeability adjustment, connect a Cut Jumper Wire as shown in Fig.M6.
(Auto Tracking is turned off.)

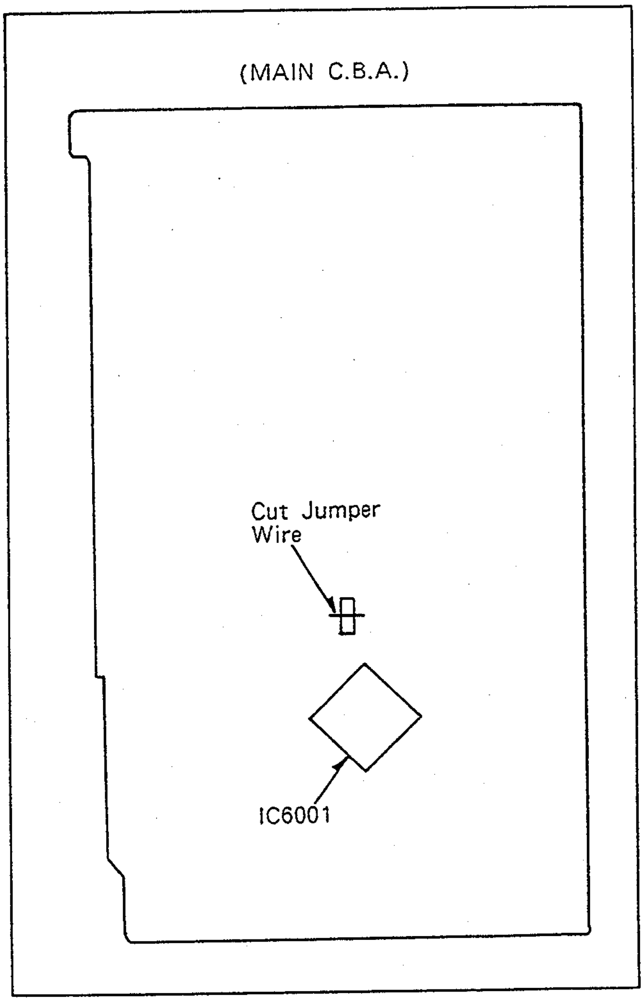

(MAIN C.B.A.)
Cut Jumper Wire
IC6001

Fig. M6

(1) Adjustment of P2 and P3 Posts

(Equipment Required)
Alignment Tape(PAL/SECAM: VFJ8125H3F,
NTSC: VFM8080HQFP)
Post Adjustment Screwdriver (VFK0329)

1. Set the tracking control into the fix position. (by pressing the tracking (+) and (−) button simultaneously on the Remote Controller)
And connect the oscilloscope to the output of the Head Amp as shown in Fig.M7.

Note:
To get a stable waveform of the Head Amp output on the oscilloscope, use the head switching pulse as a triggering signal as shown in Fig.M7.

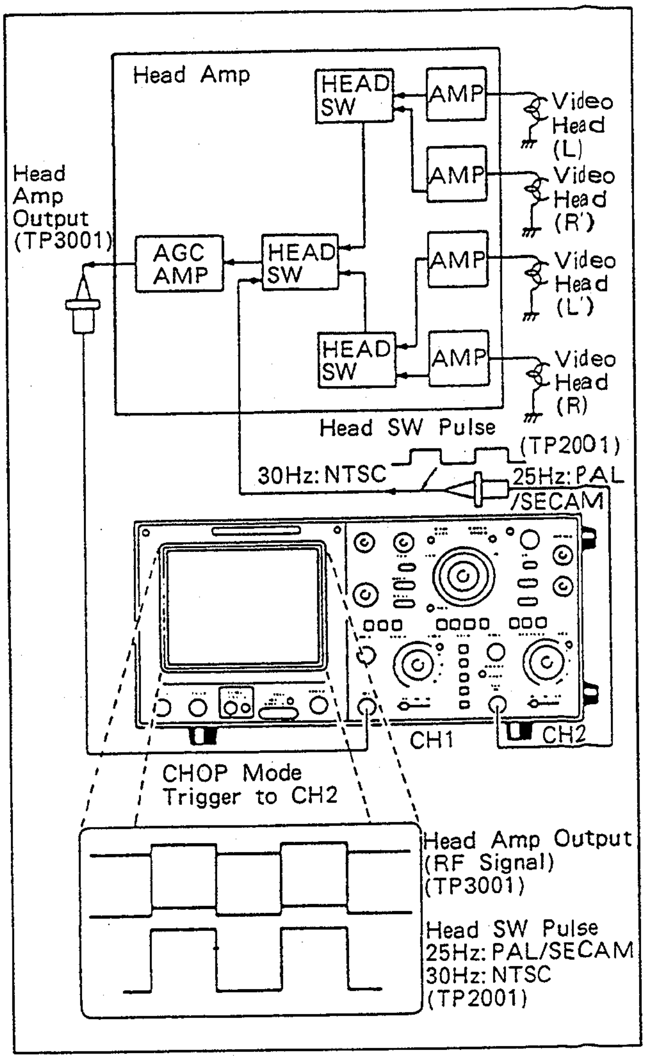

Head Amp
HEAD SW
AMP
Video Head (L)
AMP
Video Head (R')
Head Amp Output (TP3001)
AGC AMP
HEAD SW
AMP
Video Head (L')
HEAD SW
AMP
Video Head (R)
Head SW Pulse
(TP2001)
30Hz: NTSC
25Hz: PAL /SECAM
CH1
CH2
CHOP Mode
Trigger to CH2
Head Amp Output (RF Signal) (TP3001)
Head SW Pulse 25Hz: PAL/SECAM 30Hz: NTSC (TP2001)

Fig. M7 Connect of Oscilloscope

2. Playback the alignment tape.
3. If the RF envelope appears like example "A" or "B" in Fig.M8 then adjustment of the tape guide post (P2: Entrance) is necessary.
4. Adjust the tape guide post (P2) with the post adjustment screwdriver so that the RF envelope waveform at the entrance portion becomes flat as shown in Fig.M8–"C".

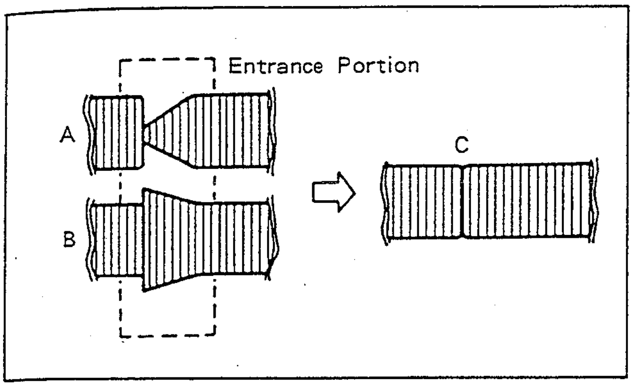

Entrance Portion
A
B
C

Fig. M8

5. If the RF envelope appears like example "D" or "E" in Fig.M9, then adjustment of the tape guide post (P3: Exit) is necessary.
6. Adjust the tape guide post (P3) in the same manner as the P2 post so that the exit portion becomes flat as shown in Fig.M9–"F".

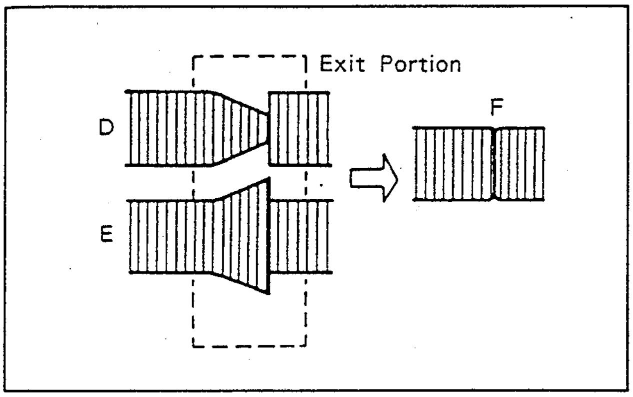

Exit Portion
D
E
F

Fig. M9

7. Turn the Tracking VR fully clockwise and counter clockwise. (Keep pressing + button or – button on the Remote Controller) The output envelope should vary nearly parallel with other condition as shown in Fig.M10.
8. Set the tracking control into centre fix position and adjust for maximum RF envelope.
If the RF envelope does not meet these specifications,
V1/V>=0.7, V2/V>=0.8 (Refer to Fig.M12)
then repeat steps 1–8 again.

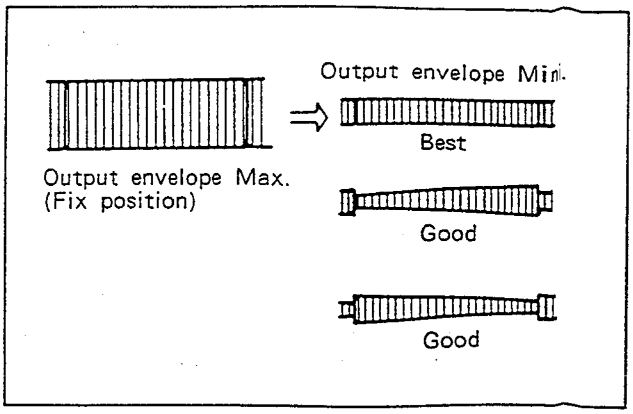

Output envelope Min.
Best
Output envelope Max.
(Fix position)
Good
Good

Fig. M10

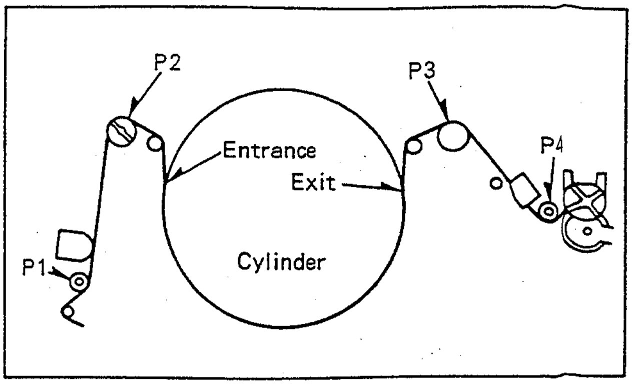

P2
P3
Entrance
Exit
P4
Cylinder
P1

Fig. M11 Loading of Posts

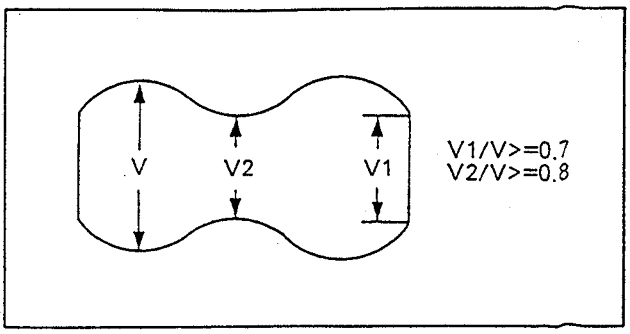

V
V2
V1
V1/V>=0.7
V2/V>=0.8

Fig. M12 Spec. of Envelope Figure

(2) Height Adjustment of A/C Head (1)

1) Install the A/C HEAD on the A/C HEAD BASE (E) by 3 screws (A),(B) and (C) with springs.
2) Tighten the screw (A) unit it touches chassis and then rotate the SCREW(A) counterclockwise for approx. 1.5 times.
3) Rotate the 2 screws(B) and (C) until A/C HEAD BASE (D) and (E) is separate.

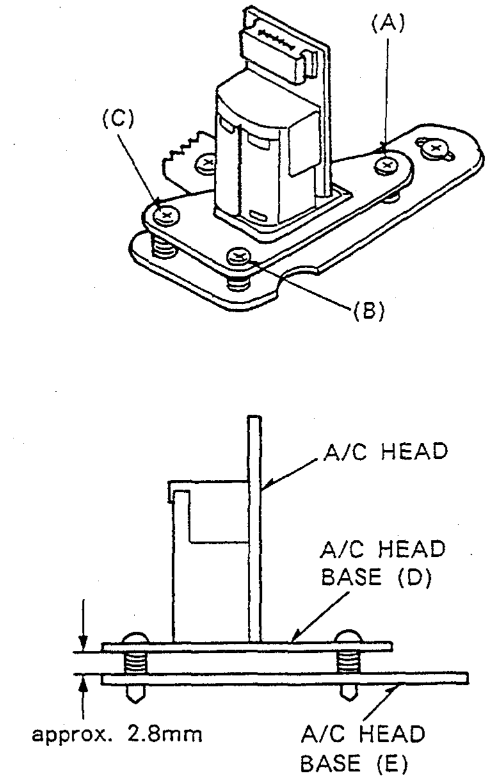
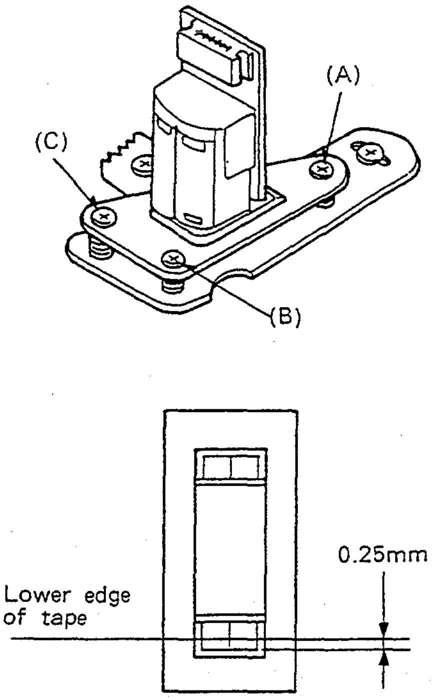


Fig. M13

(3) Height Adjustment of A/C Head (2)

1) Playback the alignment tape.
2) Rotate the screw (A) or (B) until the wrinkle appears on the lower edge of tape at P4 post.
3) Rotate the screw (A) or (B) until the wrinkle just disappears on the lower edge of tape at P4 post.
4) Connect the oscilloscope to audio output terminal.
5) Rotate the screw (C) until audio signal is maximized.



	SCREW (A)	SCREW (B)
To appear the wrinkle on the lower edge of tape	COUNTER CLOCKWISE	CLOCKWISE
To disappear the wrinkle on the lower edge of tape	CLOCKWISE	COUNTER CLOCKWISE

Fig. M14

(4) Fine–Adjustment of A/C HEAD

<When moving the A/C HEAD up>

1) Rotate the screw (A) counterclockwise until the wrinkle appears on the lower edge of tape at P4 post.
2) Rotate the screw (B) counterclockwise until the wrinkle just disappears on the lower edge of tape at P4 post.
3) Rotate the screw (C) counterclockwise until the audio signal is maximized.

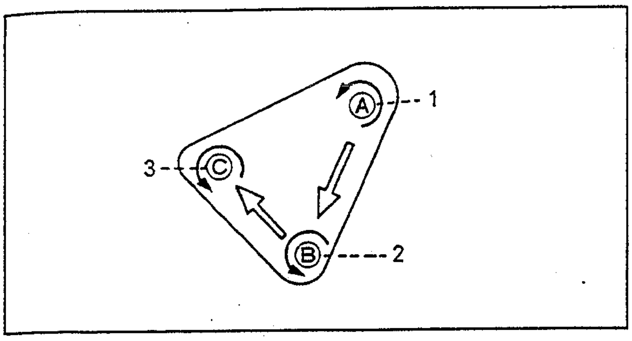


Fig. M15

<When moving the A/C HEAD down>

1) Rotate the screw (B) clockwise until the wrinkle appears on the lower edge of tape a P4 post.
2) Rotate the screw (A) clockwise until the wrinkle just disappears on the lower edge of tape at P4 post.
3) Rotate the screw (C) clockwise until the audio signal is miximized.

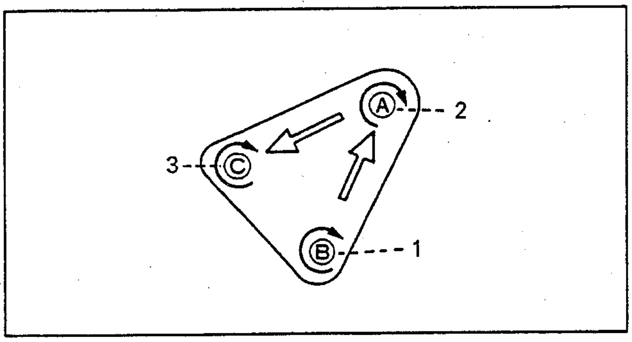


Fig. M16

(5) Horizontal Position Adjustment of A/C HEAD

1) Set the tracking control into the centre fix position. (by pressing the tracking (+) and (−) button simultaneously on the Remote Controller)
2) Connect the oscilloscope to the output of the Head Amp as shown in Fig.M7.
3) Playback the alignment tape.
4) Loosen the 2 screws (F) and (G).
5) Adjust the A/C HEAD BASE (E) until the RF envelope waveform is maximized.

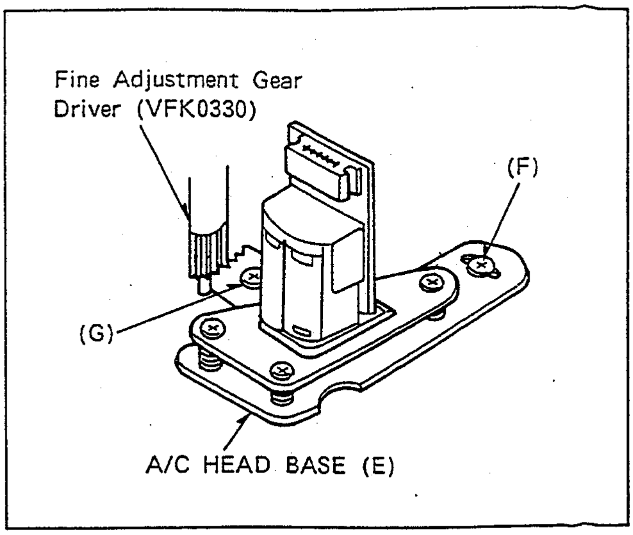


Fig. M17

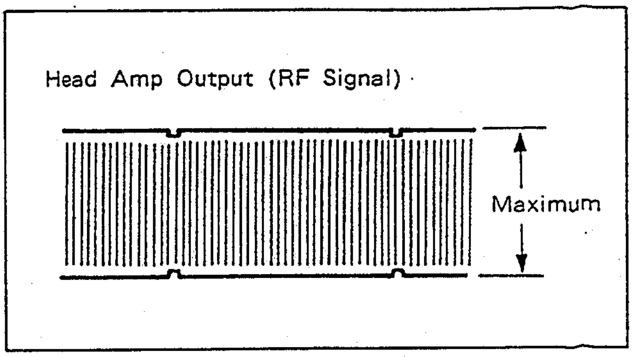
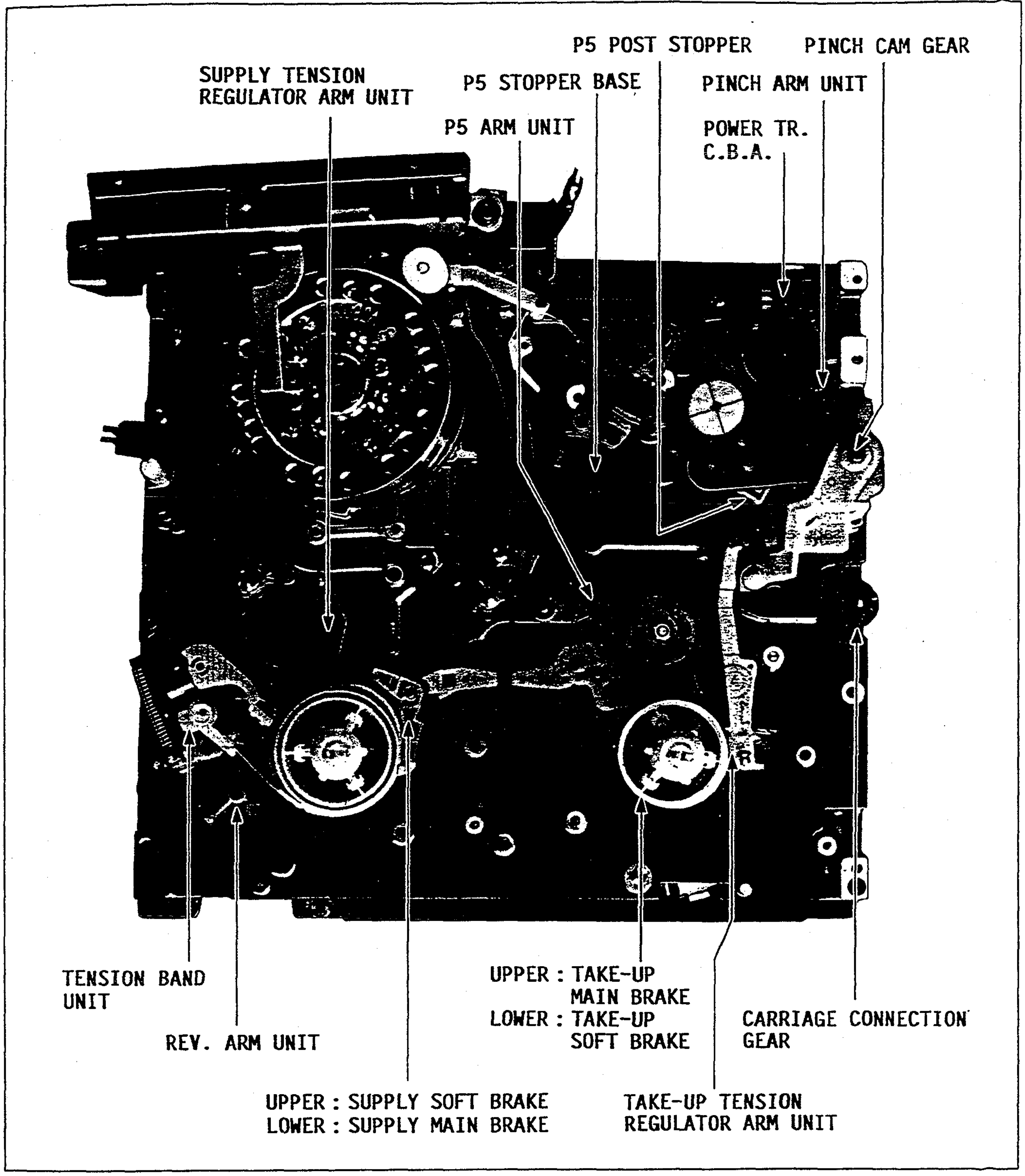


Fig. M18

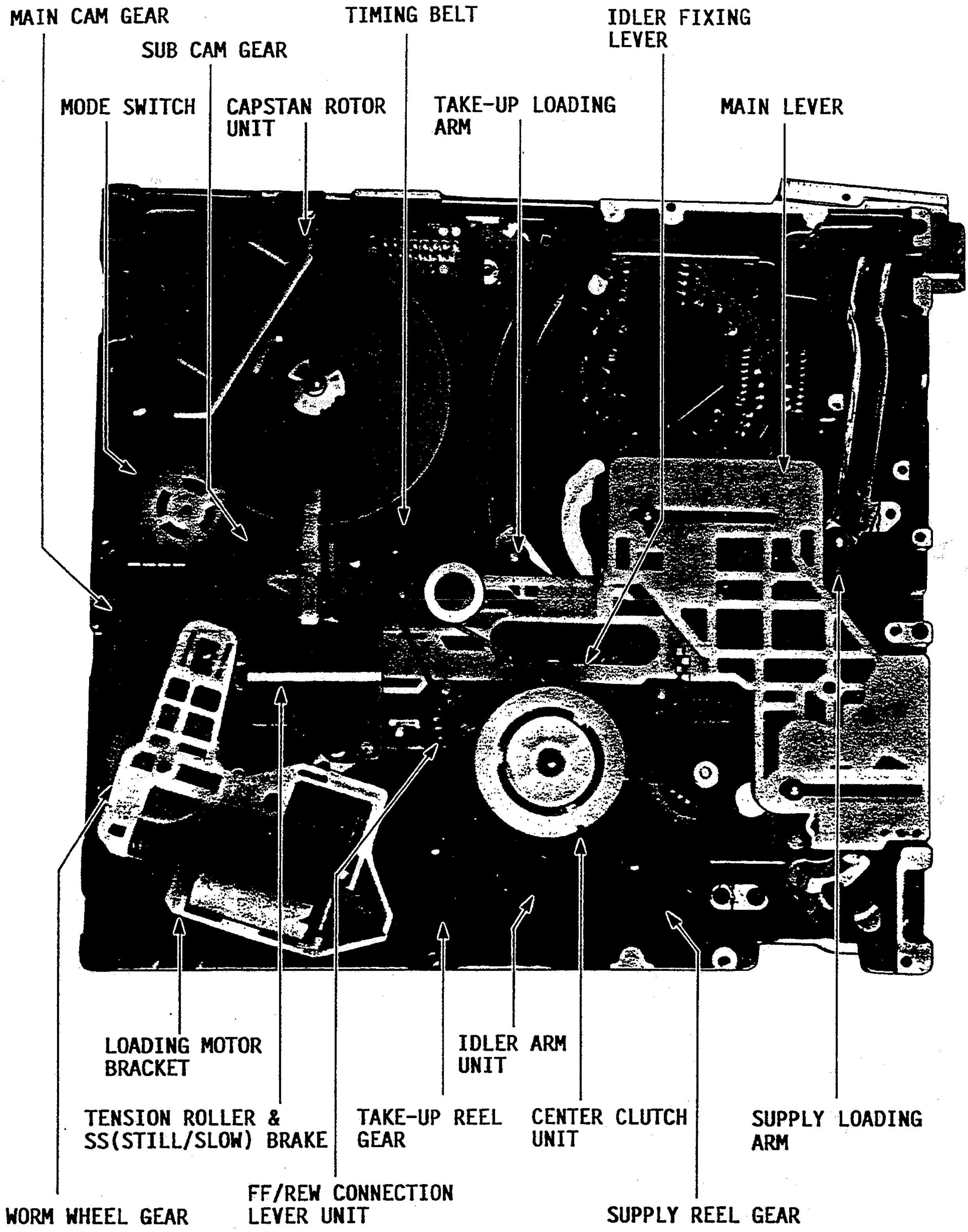
2-4. DISASSEMBLY PROCEDURES OF MECHANISM

In order to remove the mechanism components it is first necessary to remove the mechanism chassis.

[K Mechanism Component]


P5 POST STOPPER
PINCH CAM GEAR
SUPPLY TENSION REGULATOR ARM UNIT
P5 STOPPER BASE
PINCH ARM UNIT
P5 ARM UNIT
POWER TR. C.B.A.
TENSION BAND UNIT
REV. ARM UNIT
UPPER : TAKE-UP MAIN BRAKE
LOWER : TAKE-UP SOFT BRAKE
CARRIAGE CONNECTION GEAR
UPPER : SUPPLY SOFT BRAKE
LOWER : SUPPLY MAIN BRAKE
TAKE-UP TENSION REGULATOR ARM UNIT

Top View of K Mechanism


MAIN CAM GEAR
TIMING BELT
IDLER FIXING LEVER
SUB CAM GEAR
MODE SWITCH
CAPSTAN ROTOR UNIT
TAKE-UP LOADING ARM
MAIN LEVER
LOADING MOTOR BRACKET
IDLER ARM UNIT
TENSION ROLLER & SS(STILL/SLOW) BRAKE
TAKE-UP REEL GEAR
CENTER CLUTCH UNIT
SUPPLY LOADING ARM
WORM WHEEL GEAR
FF/REW CONNECTION LEVER UNIT
SUPPLY REEL GEAR

Bottom View of K Mechanism

2-4-1. REMOVAL OF THE MECHANISM CHASSIS

1) Remove the 2 screws(A) push the HOLDER PLATE slightly to the rear side.
2) Remove the screw(B).
3) Disconnect all cables and connectors on the mechanism chassis and connector P6003 on the MAIN C.B.A. (connecting to DEW SENSOR). (Use extreme care when disconnecting the P1506.)
4) Lift the mechanism chassis out of the unit.

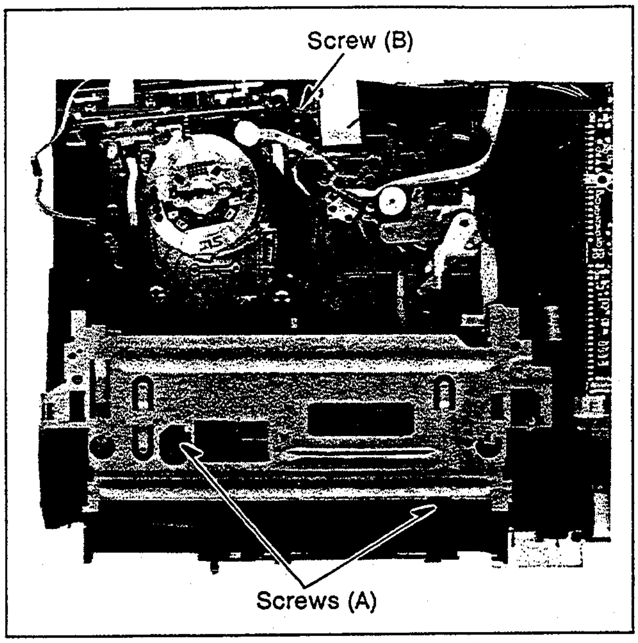

Screw (B)
Screws (A)

Fig. A1

2-4-2. REMOVAL OF THE MECHANISM CONNECTION C.B.A.

1) Remove the 4 screws(C).
2) Lift up on the C.B.A.

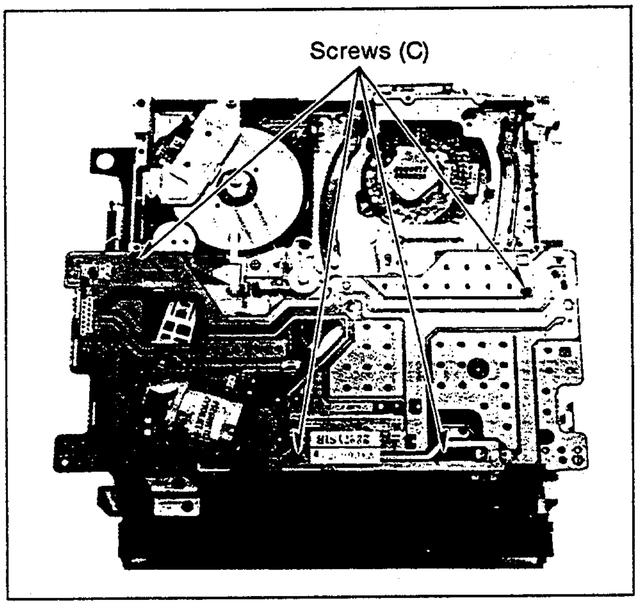


Fig. A2

2-4-3. REMOVAL OF THE TENSION ROLLER AND SS BRAKE

1) Remove the 2 screws(D).
2) Remove the TENSION ROLLER and the SS BRAKE.

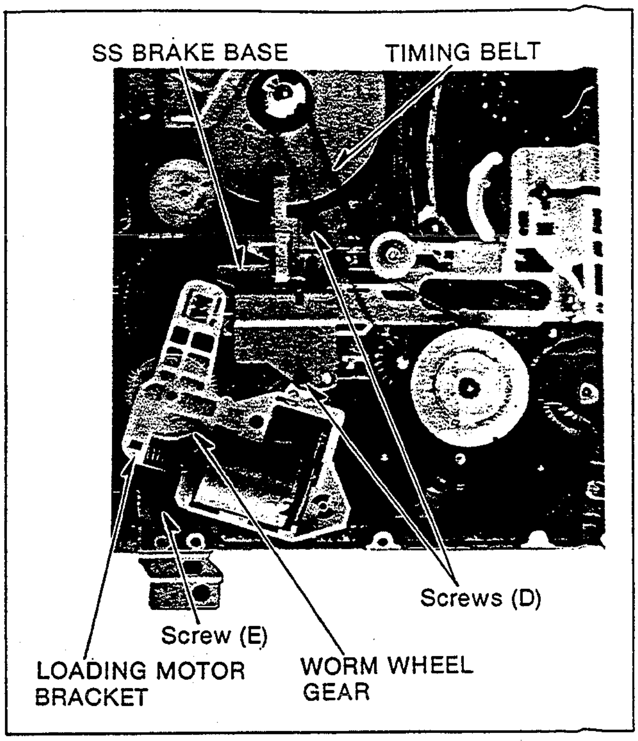

SS BRAKE BASE
TIMING BELT
Screws (D)
Screw (E)
LOADING MOTOR BRACKET
WORM WHEEL GEAR

Fig. A3

2-4-4. REMOVAL OF THE TIMING BELT

1) Remove the TIMING BELT.

2-4-5. REMOVAL OF THE LOADING MOTOR BRACKET

1) Remove the screw(E) as shown in Fig.A3.
2) Disconnect the locking tab on the right by pushing the locking tab in as shown in Fig.A4.
3) Lift up on the LOADING MOTOR BRACKET and push the BRACKET towards the MAIN CAM GEAR as shown in Fig.A3.
4) Lift the WORM WHEEL GEAR off the shaft.

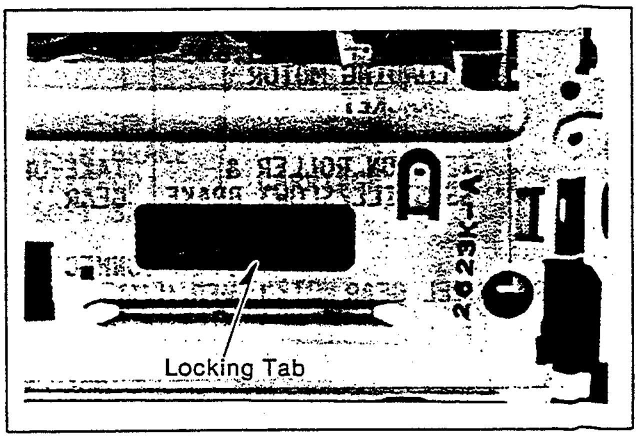

Locking Tab

Fig. A4

2-4-6. REMOVAL OF THE MAIN LEVEL UNIT

1) Remove the 2 cut washers.
2) Remove the MAIN LEVER UNIT.

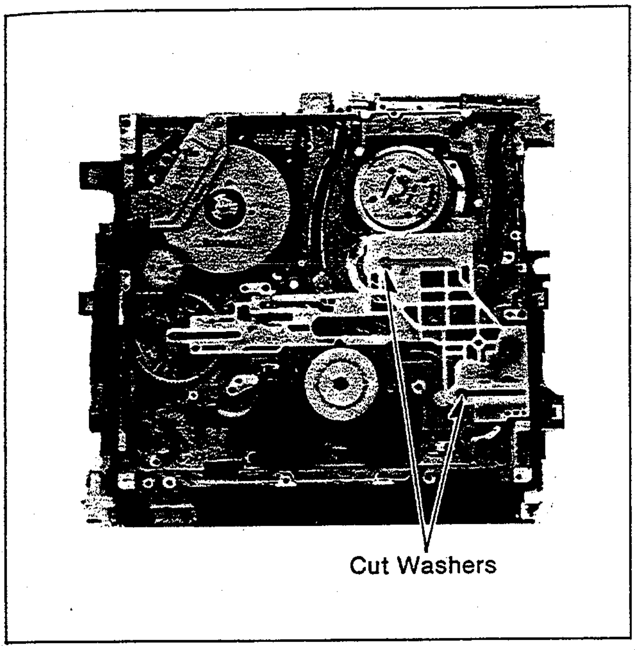

Cut Washers

Fig. A5

2-4-7. REMOVAL OF THE TAKE-UP AND SUPPLY LOADING ARMS

1) Remove the TAKE-UP and SUPPLY LOADING GEARs by lifting them up off the post.

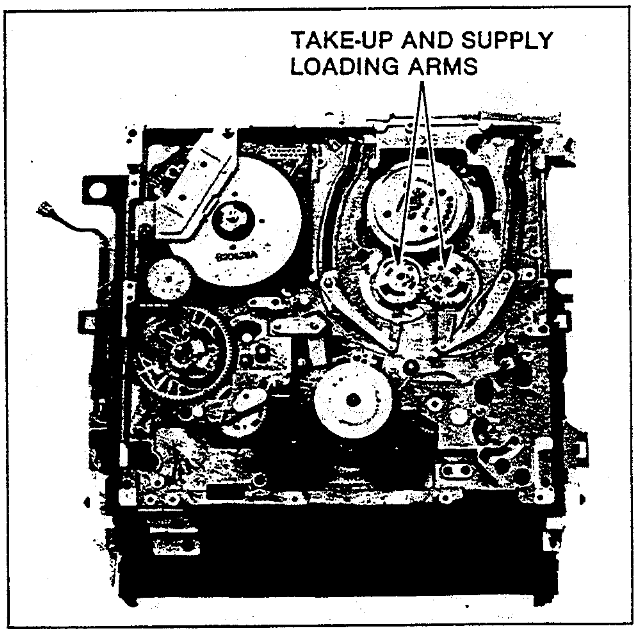

TAKE-UP AND SUPPLY
LOADING ARMS

Fig. A6

2-4-8. REMOVAL OF THE MODE SWITCH

1) Remove screw(F).
2) Remove the MODE SWITCH.

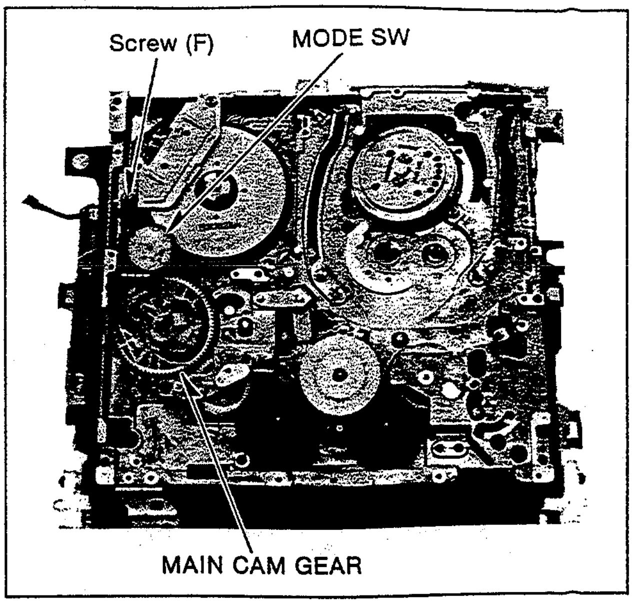

Screw (F)
MODE SW
MAIN CAM GEAR

Fig. A7

2-4-9. REMOVAL OF THE MAIN CAM GEAR

1) Lift the MAIN CAM GEAR off the shaft.

2-4-10. REMOVAL OF THE CAPSTAN ROTOR UNIT

1) Remove the screw(G) and remove the CAPSTAN STOPPER as shown in Fig.A8.

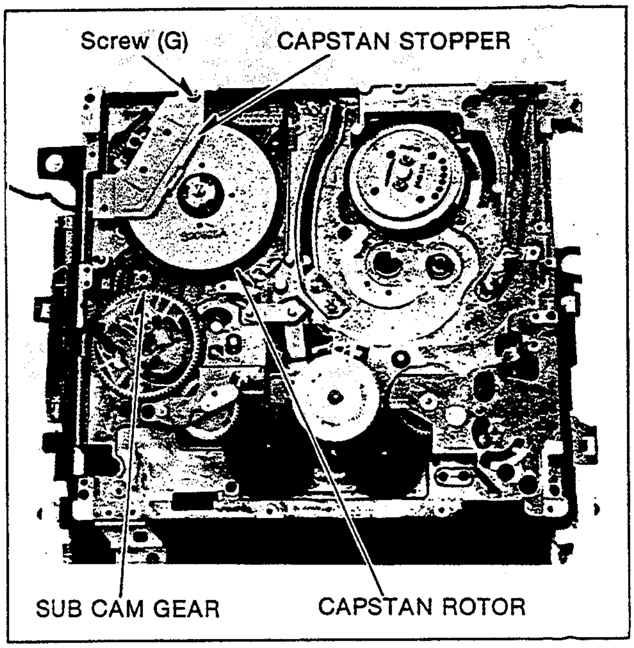

Screw (G)
CAPSTAN STOPPER
SUB CAM GEAR
CAPSTAN ROTOR

Fig. A8

2) Pull out the CAPSTAN ROTOR.
(When the CAPSTAN ROTOR is removed, 2 OIL SEALs are left in the CAPSTAN ROTOR HOUSING Fig.A9.. To avoid losing the OIL SEALs, place them back on the CAPSTAN SHAFT.)

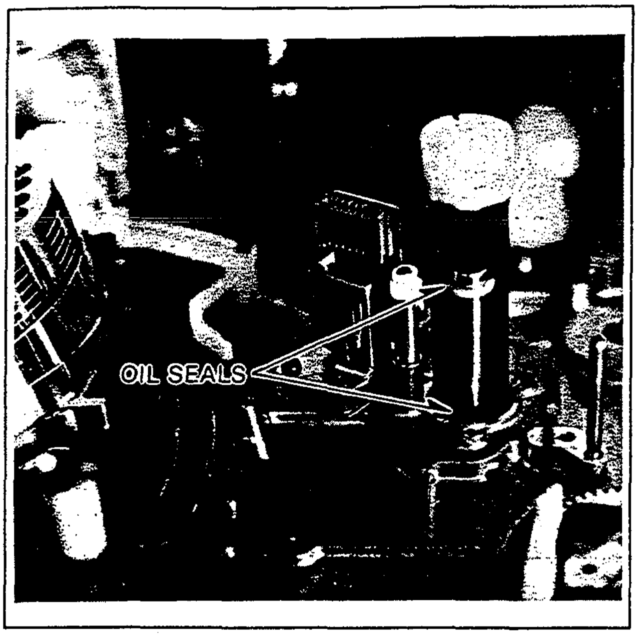


Fig. A9

3) Remove the 3 screws(H) and remove the CAPSTAN STATOR as shown in Fig.A10.

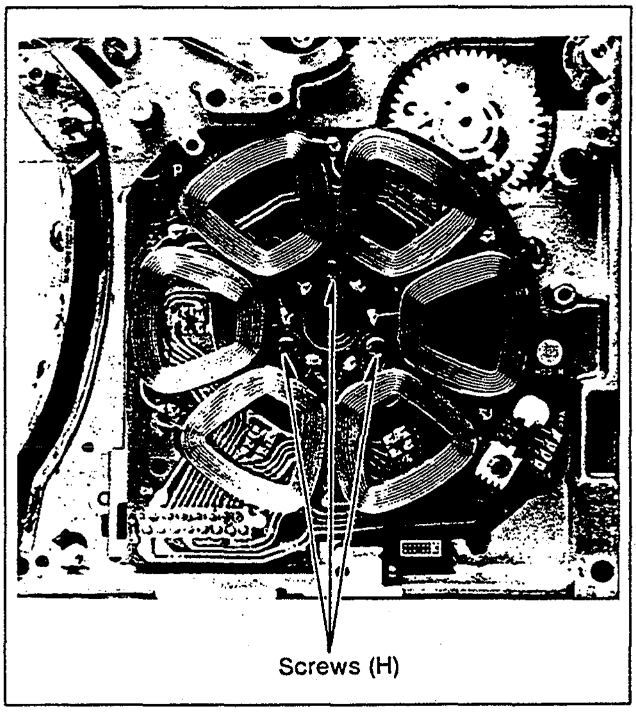


Fig. A10

2–4–11. REMOVAL OF THE SUB CAM GEAR

1) Lift the SUB CAM GEAR off the shaft.

2–4–12. REMOVAL OF THE CENTRE CLUTCH

1) Remove the cut washer.
2) Remove the CENTRE CLUTCH.

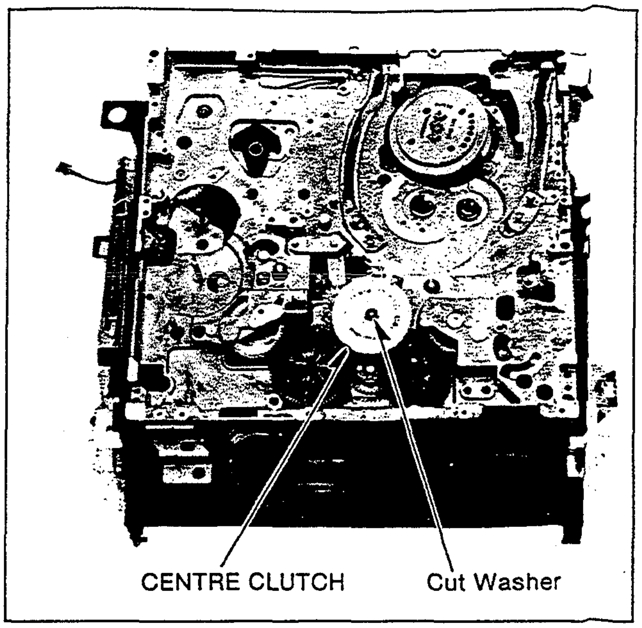

CENTRE CLUTCH
Cut Washer

Fig. A11

2–4–13. REMOVAL OF THE TAKE-UP AND SUPPLY REEL GEARs

1) Unlock the locking tab and lift up on the reel.

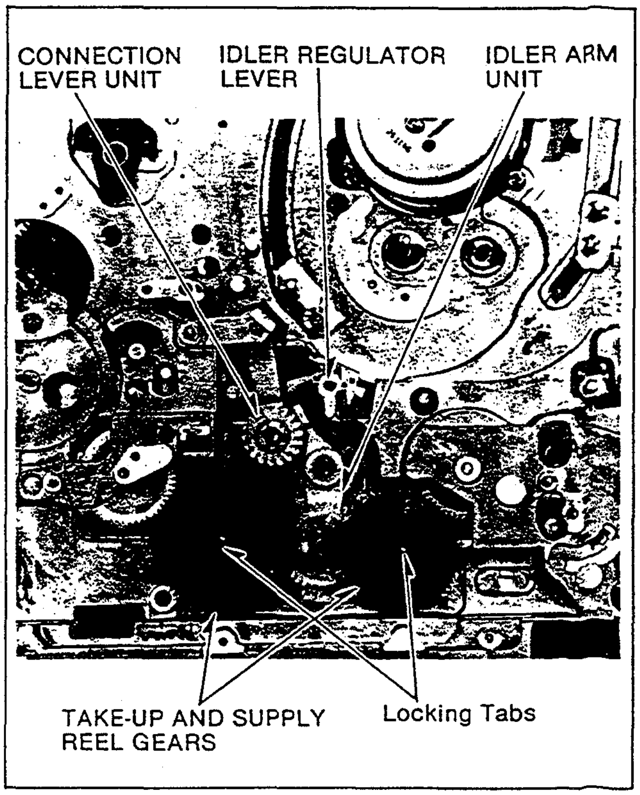

CONNECTION LEVER UNIT
IDLER REGULATOR LEVER
IDLER ARM UNIT
TAKE-UP AND SUPPLY REEL GEARS
Locking Tabs

Fig. A12

2-4-14. REMOVAL OF THE IDLER ARM UNIT, CONNECTION LEVER UNIT AND IDLER REGULATOR LEVER

1) Lift the IDLER ARM UNIT and CONNECTION LEVER UNIT off the shaft.
2) Remove the IDLER REGULATOR LEVER.

2-4-15. REMOVAL OF THE TOP PLATE

1) Push the locking tabs from the outer side to inside as shown in Fig.A13.
2) Lift up on the TOP PLATE.

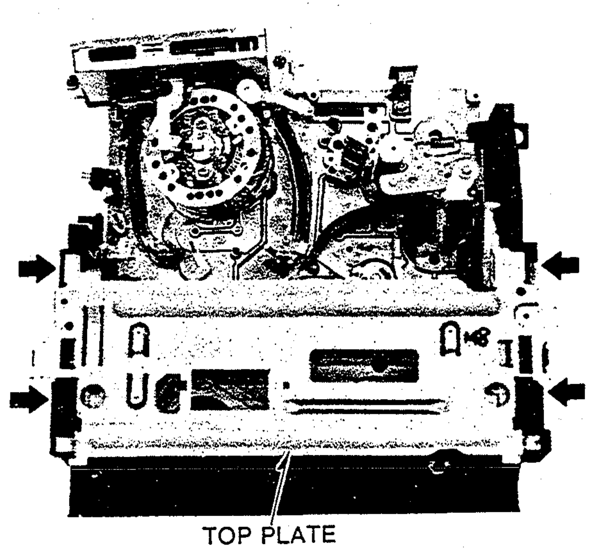


Fig. A13

NOTE:
If locking tab is broken, TOP PLATE can be installed by screws(XTB26+8G) as shown in Fig.A14.

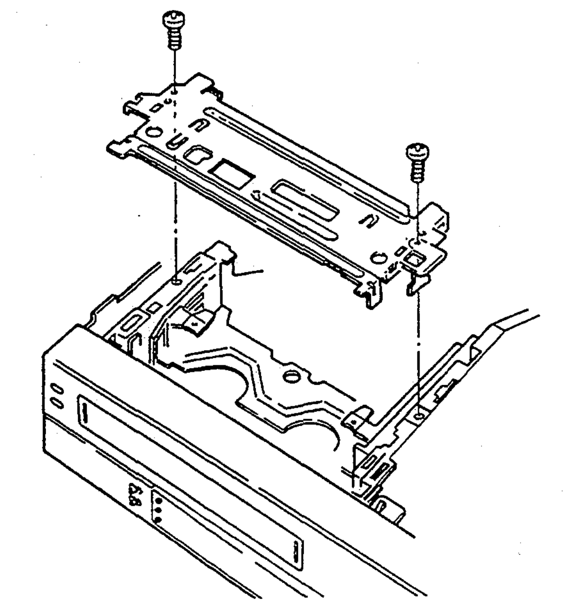


Fig. A14

2-4-16. REMOVAL OF THE CASSETTE HOLDER

1) Slide the HOLDER PLATE in the rear and lift up.
2) Remove the 4 screws(I).
3) Remove the CASSETTE HOLDER.

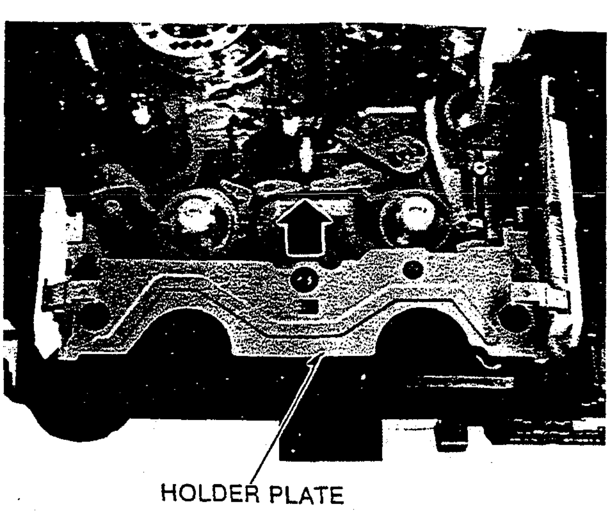


Fig. A15

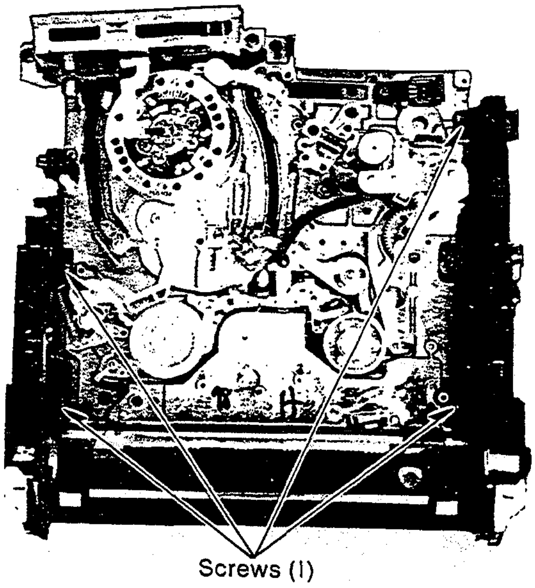


Fig. A16

2-4-17. REMOVAL OF THE PINCH ARM UNIT

1) Unlock the locking tab on the OPENER PIECE and remove it from the shaft.
2) Remove the PINCH ARM UNIT from the shaft.

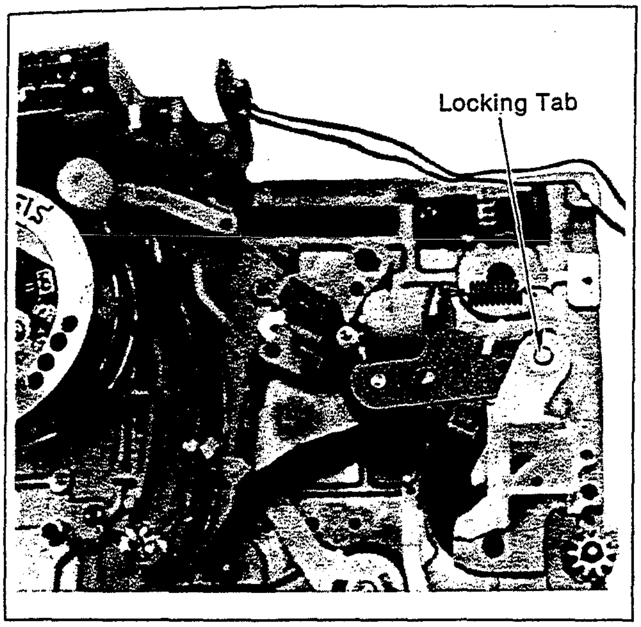

Locking Tab

Fig. A17

2-4-18. REMOVAL OF THE PINCH CAM GEAR AND P5 ARM UNIT

1) Unlock the locking tab of the P5 STOPPER and remove the P5 STOPPER.
2) Remove the screw(J) and the cut washer.
3) Remove the P5 STOPPER BASE.
4) Remove the PINCH CAM GEAR and P5 ARM UNIT.

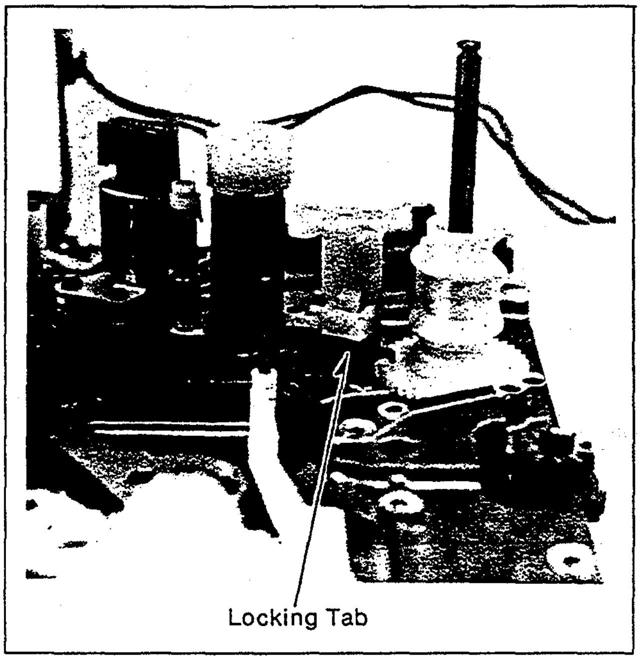

Locking Tab

Fig. A18

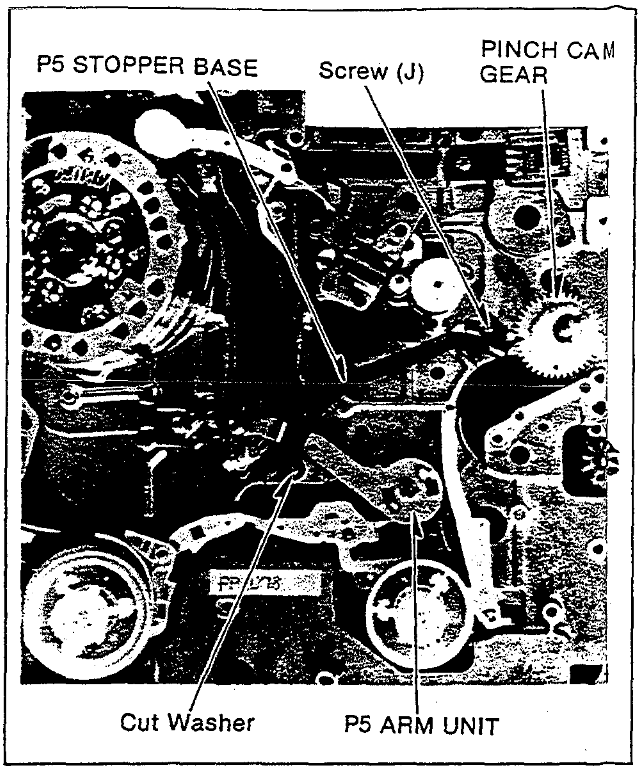

P5 STOPPER BASE
Screw (J)
PINCH CAM GEAR
Cut Washer
P5 ARM UNIT

Fig. A19

2-4-19. REMOVAL OF THE TAKE-UP TENSION REGULATOR ARM UNIT

1) Disconnect the spring from the bottom of the chassis.
2) Unlock the locking tab and lift the TAKE-UP TENSION REGULATOR ARM UNIT off the shaft.

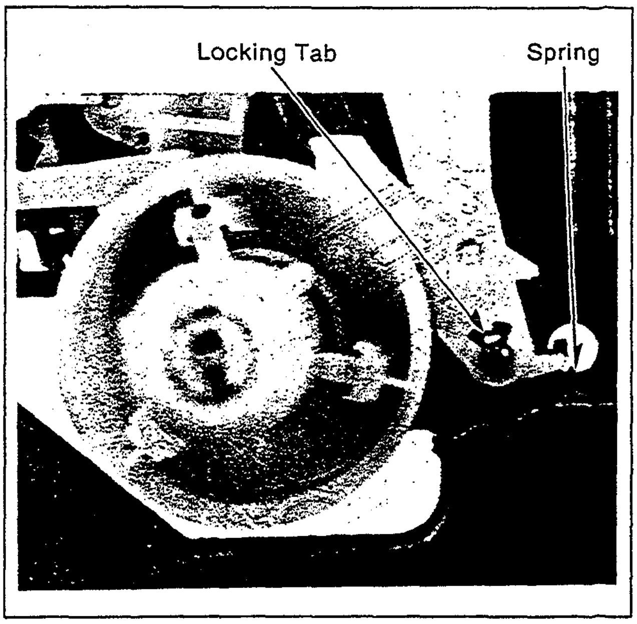

Locking Tab
Spring

Fig. A20

2-4-20. REMOVAL OF THE CARRIAGE CONNECTION GEAR

1) Remove the cut washer.
2) Lift the CARRIAGE CONNECTION GEAR off the shaft.

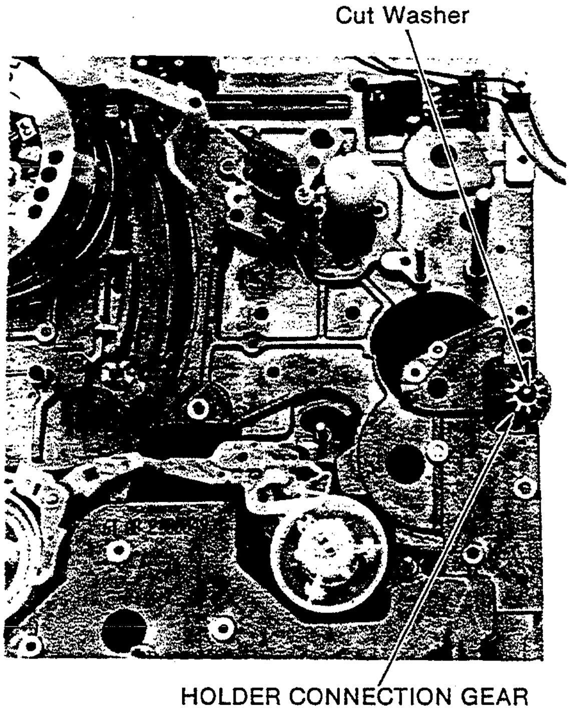

Cut Washer
HOLDER CONNECTION GEAR

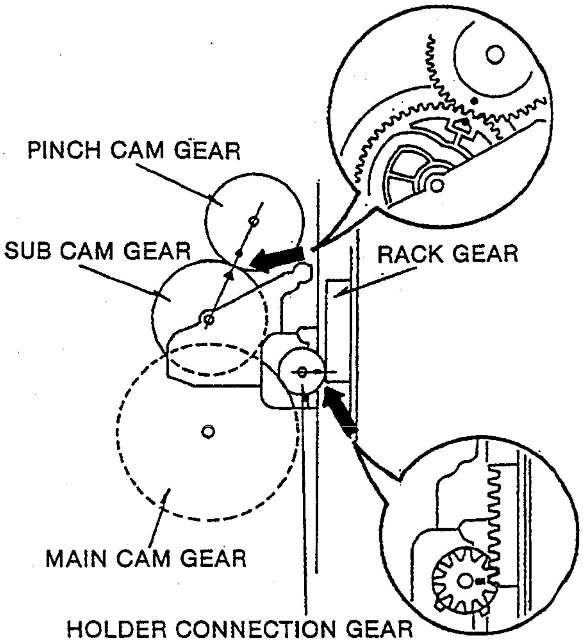
Fig. A21

2-5. ASSEMBLY PROCEDURES OF MECHANISM

2-5-1. VIEW OF PHASE ALIGNMENT

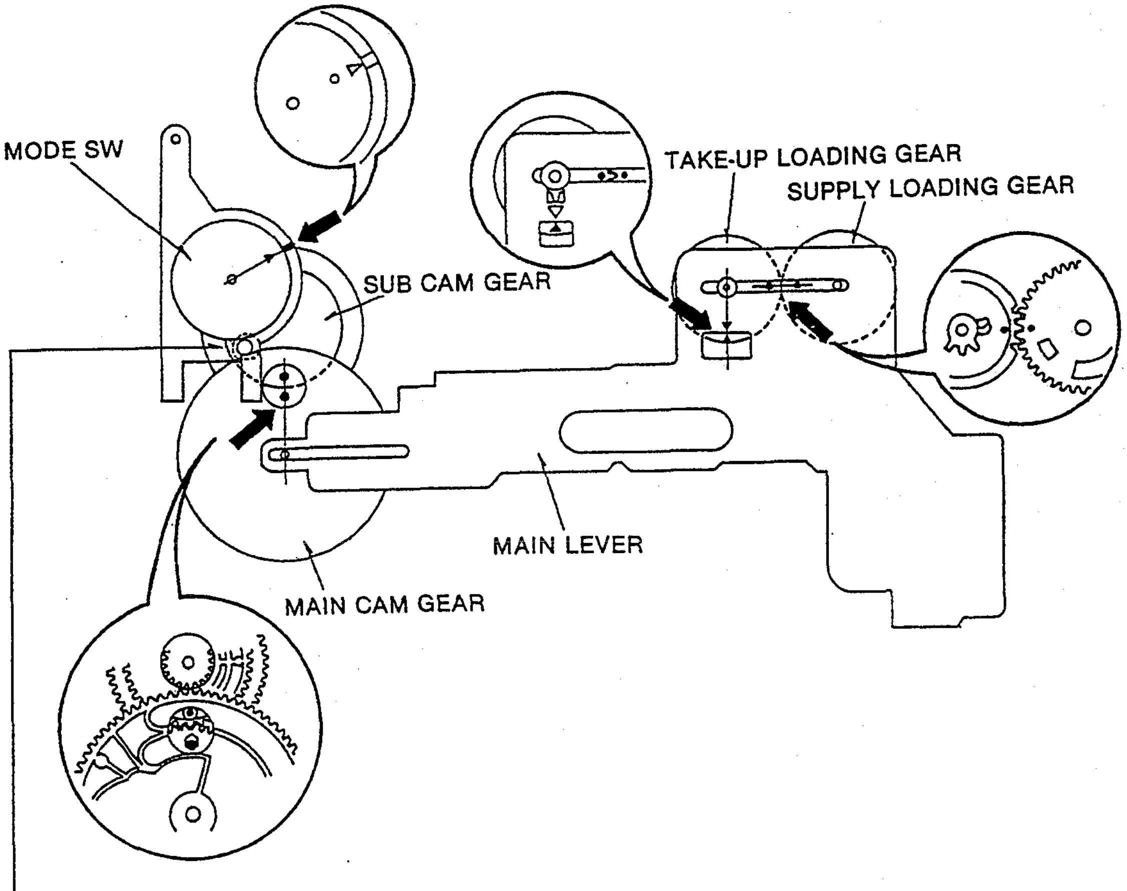
The gear phase alignment is perform in the cassette down position and is crucial for the K Mechanism to operate correctly.

1) Top View of Gear Phase Alignment Marks. There are alignment marks on the Pinch Cam Gear and Sub Cam Gear. There is one alignment mark on the carriage connection gear.


PINCH CAM GEAR
SUB CAM GEAR
RACK GEAR
MAIN CAM GEAR
HOLDER CONNECTION GEAR

Top View of Gear Phase Alignment

2) Bottom View of Gear Phase Alignment Marks.
There are alignment marks on Take-up Loading Gear and Supply Loading Gear.
There is an additional mark on the Take-up Loading Gear that aligns with the mark on the main lever. There are alignment marks on the Main Cam Gear and the Sub Cam Gear. The mode switch gear mark aligns with a notch in the mode switch frame.


MODE SW
TAKE-UP LOADING GEAR
SUPPLY LOADING GEAR
SUB CAM GEAR
MAIN LEVER
MAIN CAM GEAR

There is a hole on the Sub-Cam Gear and a hole on the chassis that are used for alignment reference.

Bottom View of Gear Phase Alignment

2-5-2. ASSEMBLY OF THE CARRIAGE CONNECTION GEAR

1) Install the CARRIAGE CONNECTION GEAR as shown in Fig.A21.
2) Install the cut washer.

2-5-3. ASSEMBLY OF THE TAKE-UP TENSION REGULATOR ARM UNIT, P5 ARM UNIT PINCH CAM GEAR, P5 STOPPER BASE, P5 STOPPER, PINCH CAM UNIT AND OPENER PIECE

1) Install the TAKE-UP TENSION REGULATOR ARM UNIT.
2) Hook the spring to hole on the chassis.
3) Install the P5 ARM UNIT and PINCH CAM GEAR.
4) Install the P5 STOPPER BASE with cut washer and screw(J).
5) Install the P5 STOPPER, PINCH ARM UNIT and OPENER PIECE.

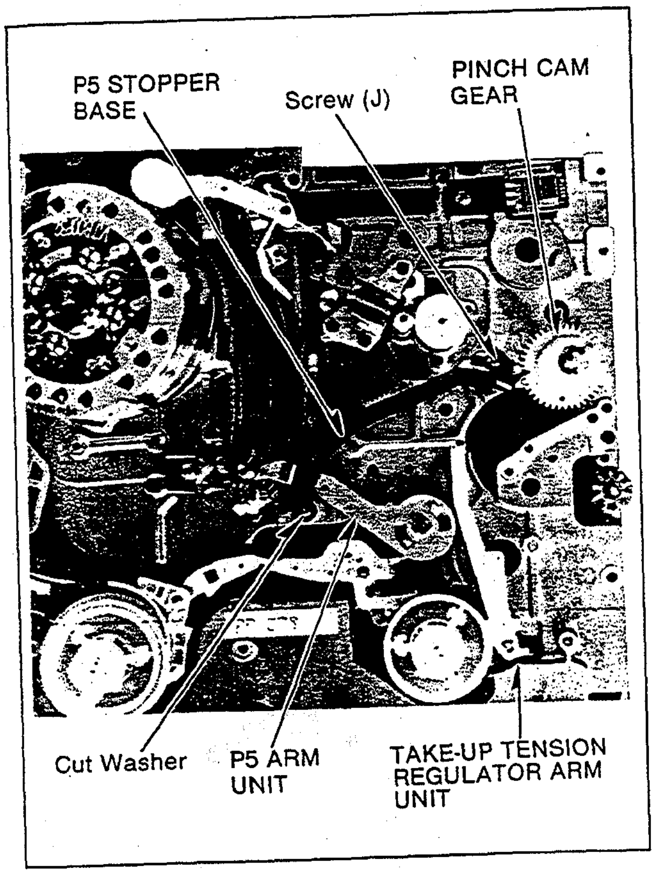

P5 STOPPER BASE
Screw (J)
PINCH CAM GEAR
Cut Washer
P5 ARM UNIT
TAKE-UP TENSION REGULATOR ARM UNIT

Fig. K1

2-5-4. ASSEMBLY OF THE IDLER ARM UNIT, TAKE-UP AND SUPPLY REEL GEARS, IDLER REGULATOR LEVER, CONNECTION LEVER UNIT AND CENTRE CLUTCH

1) Install the IDLER UNIT, TAKE-UP and SUPPLY REEL GEARs, IDLER REGULATOR LEVER and CONNECTION LEVER UNIT.
2) Install the CENTRE CLUTCH with cut washer.

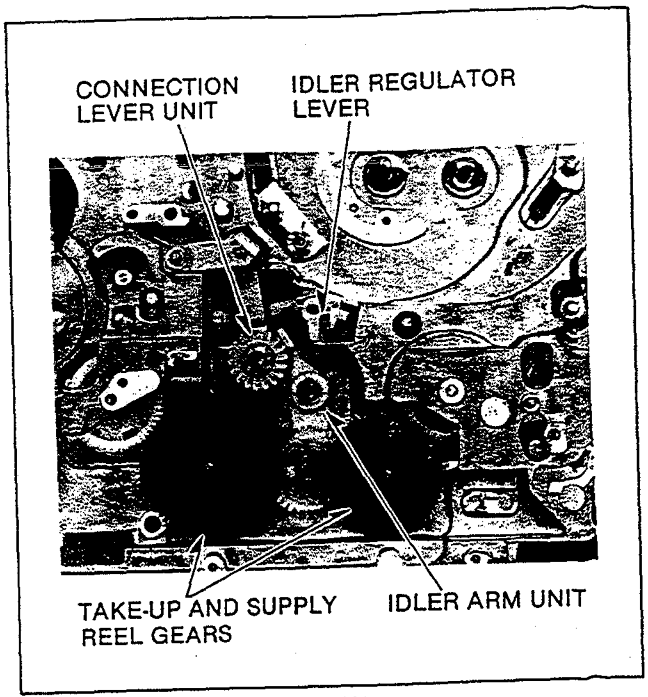

CONNECTION LEVER UNIT
IDLER REGULATOR LEVER
TAKE-UP AND SUPPLY REEL GEARS
IDLER ARM UNIT

Fig. K2

2-5-5. ASSEMBLY OF THE SUB CAM GEAR

The SUB CAM GEAR is used for the reference of the phase.

1) Install the SUB CAM GEAR so that the chassis hole aligns with hole in the SUB CAM GEAR. Also, the hole in the outer gear of the SUB CAM GEAR must align with the hole in the PINCH CAM GEAR. The boss on the PINCH ARM must be installed in the cam groove of the SUB-CAM GEAR. This is used for the reference of the phase. To aid installation of the SUB-CAM GEAR insert a fixing pin into the holes of the SUB-CAM GEAR and the chassis.

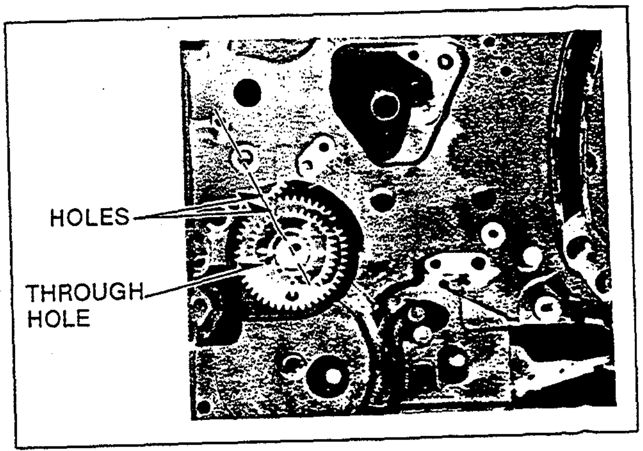

HOLES
THROUGH HOLE

Fig. K3

2-5-6. ASSEMBLY OF THE STATOR UNIT

1) Place the STATOR UNIT into position. Loosely reinstall the 3 screws that secure the STATOR and HOUSING UNIT. Next insert the CENTERING PIN then tighten the 3 screws as shown in Fig.K4.

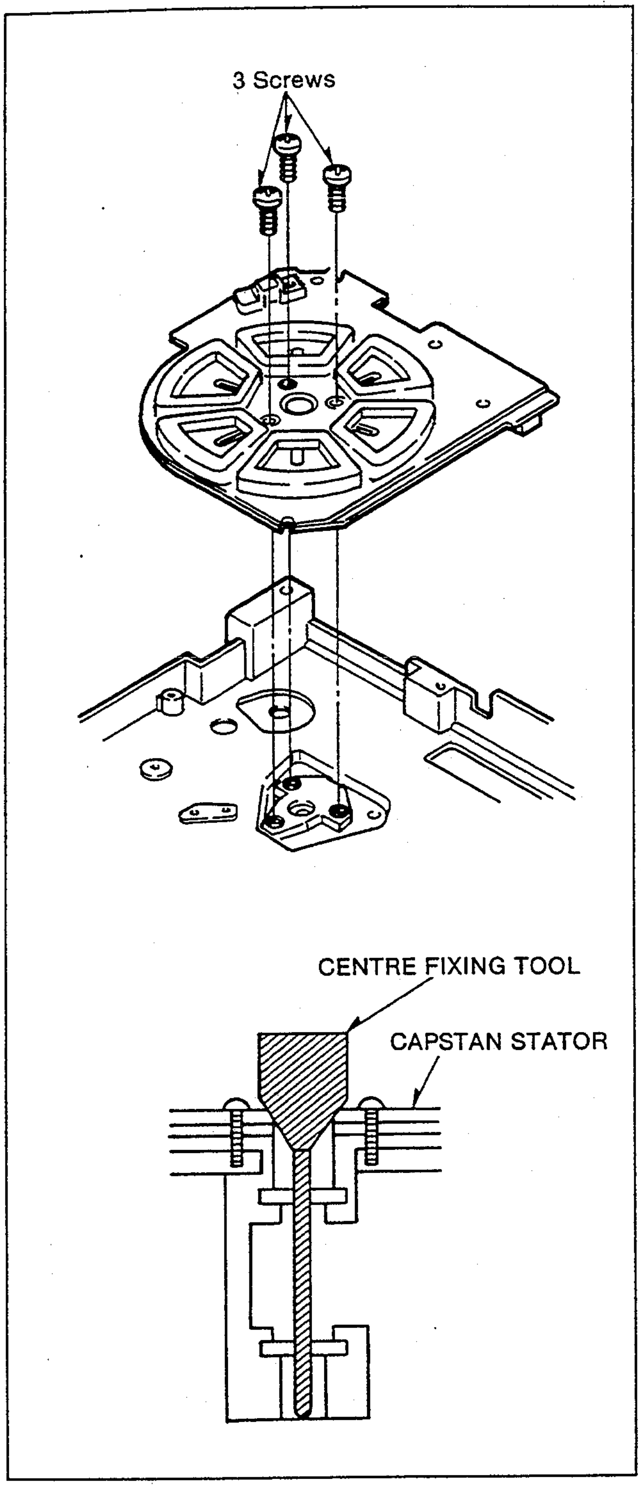


Fig. K4

2) Remove the oil seal from the ROTOR SHAFT. Partially install the ROTOR SHAFT into the lower position and install the oil seal. Insert the ROTOR SHAFT farther into the housing and install the second OIL SEAL in the upper position. Push the lower OIL SEAL down the ROTOR SHAFT into the housing.

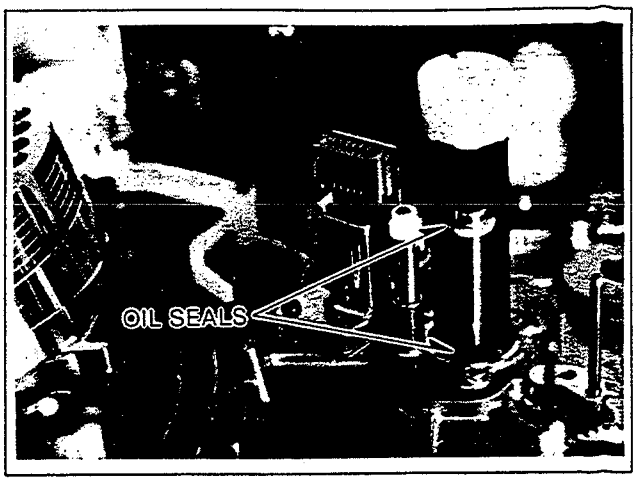


Fig. K5

3) Clean the ROTOR SHAFT after replacement. Reinstall the ROTOR STOPPER and the screw on the top side.

2-5-7. ASSEMBLY OF THE MAIN CAM GEAR

NOTE:
Before installing the MAIN CAM GEAR, set the CONNECTION GEAR so that the side of the gear with no teeth is towards the MAIN CAM GEAR.

1) Install the MAIN CAM GEAR so that the hole marker aligns with the SUB-CAM GEAR and insert the boss of the TAKE-UP TENSION REGULATOR ARM into the slot on the bottom of the MAIN CAM GEAR.

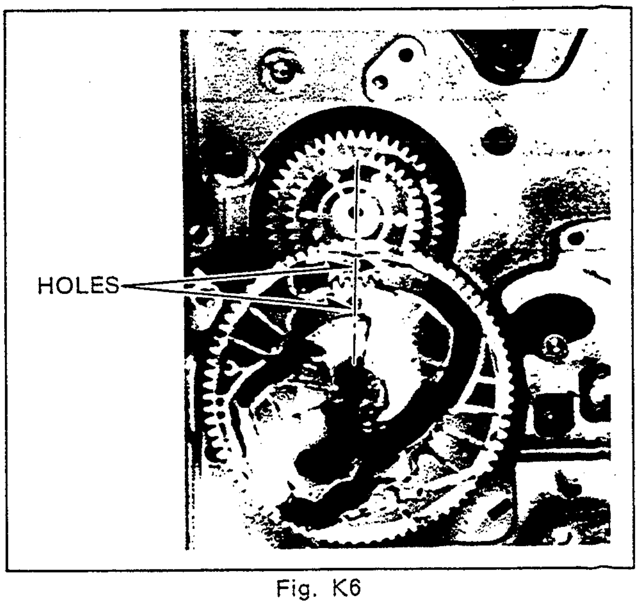


Fig. K6

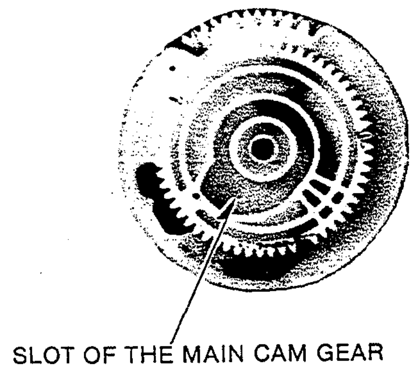


Fig. K7

2-5-8. ASSEMBLY OF THE MODE SW

1) Align the mark on the MODE SWITCH GEAR with the notch on the MODE SWITCH FRAME.
2) Install the MODE SWITCH taking care that all the phase alignments are correct. Check the CAM GEAR timing by rotating the MAIN CAM GEAR.
3) Install the screw(K) the retains the MODE SWITCH and ROTOR STOPPER.

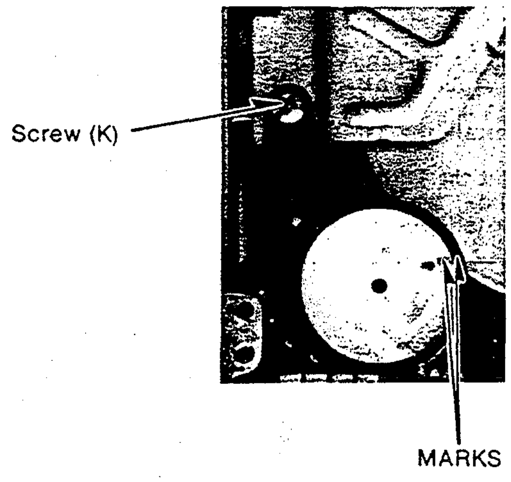


Fig. K8

2-5-9. ASSEMBLY OF THE T & S LOADING ARMS

1) Set the shaft holders to the unloaded position. Take care that the P5 POST does not interfere with the P3 Post or prevent it from going to the unloaded position. The TENSION ARM must be set to the position that will allow the P2 POST to move back to the unloaded position.

2) Install the TAKE-UP LOADING ARM and SUPPLY LOADING ARM, aligning the marks on the both GEARS.

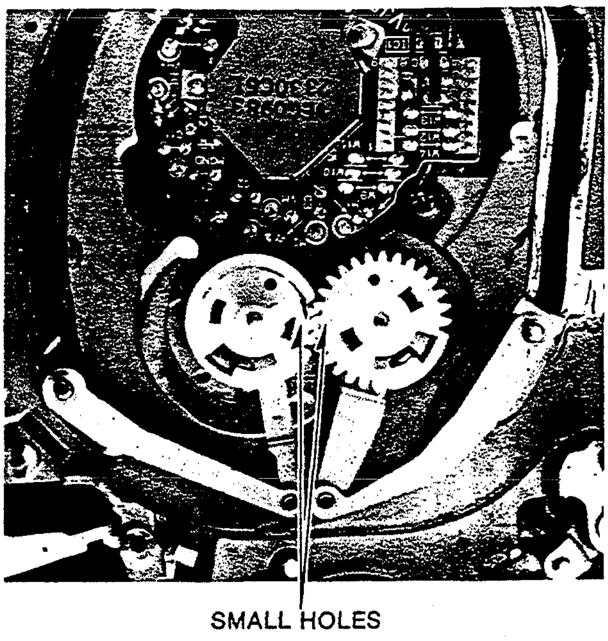


Fig. K9

2-5-10. ASSEMBLY OF THE MAIN LEVER

1) Install the MAIN LEVER ARM checking that the boss arms and shafts are in the correct position and the mark on the MAIN LEVER ARM is aligned with mark on the TAKE-UP LOADING GEAR.

2) Install the 2 cut washers.

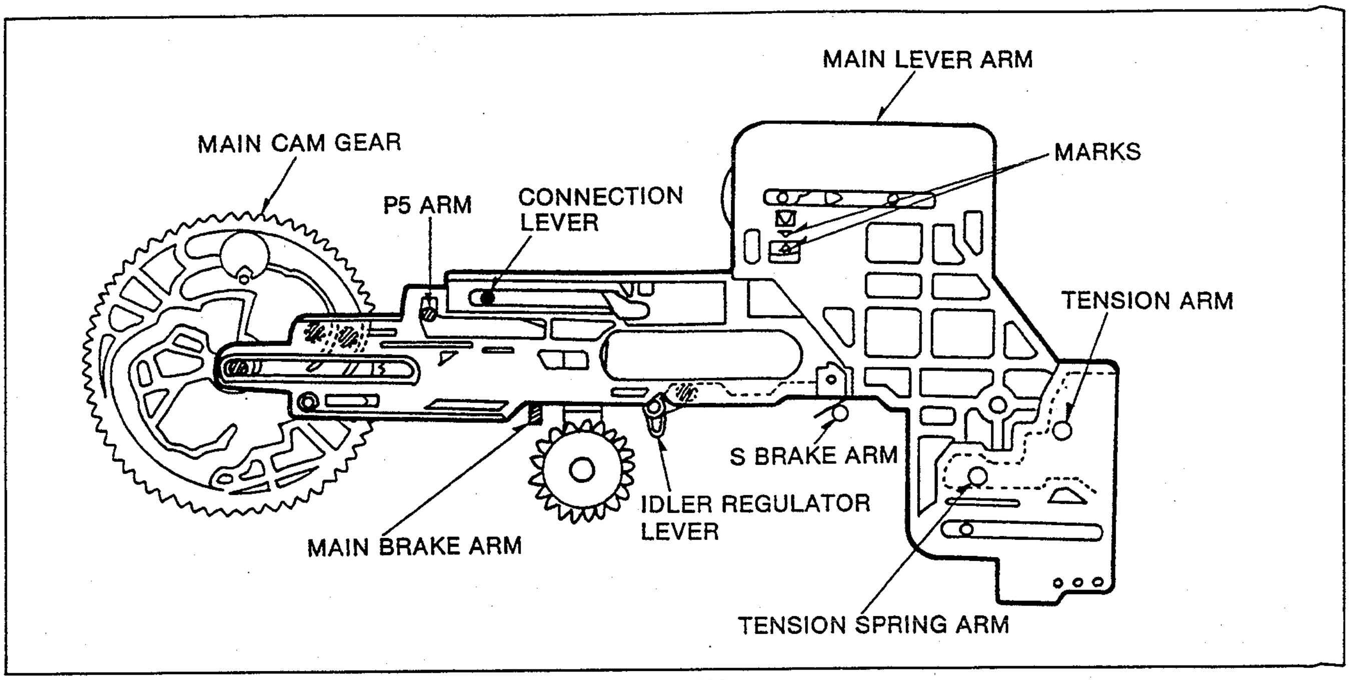

MAIN LEVER ARM
MAIN CAM GEAR
MARKS
P5 ARM
CONNECTION LEVER
TENSION ARM
S BRAKE ARM
IDLER REGULATOR LEVER
MAIN BRAKE ARM
TENSION SPRING ARM

Fig. K10

2-5-11. ASSEMBLY OF THE WORM WHEEL GEAR & LOADING MOTOR BRACKET

1) Reinstall the WORM WHEEL GEAR.

2) Install the LOADING MOTOR BRACKET. First set the BRACKET over the MAIN CAM GEAR shaft and slide until it locks. Then push down on the BRACKET until the locking tab is connected to the chassis. Reinstall the screw(L).

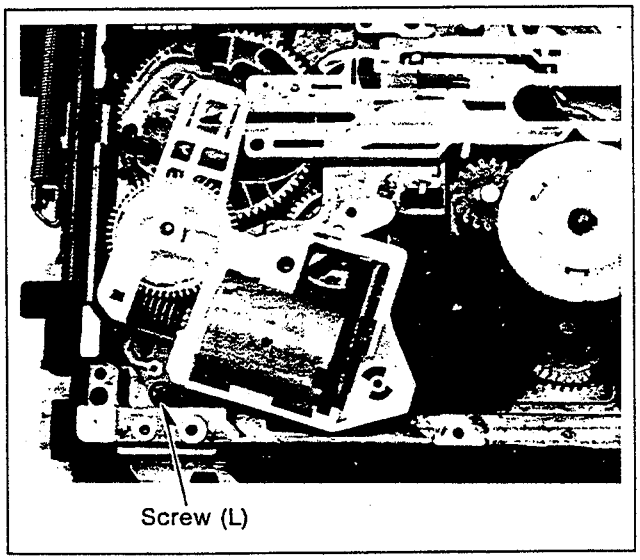


Fig. K11

2-5-12. ASSEMBLY OF THE TIMING BELT & SS BRAKE BASE

1) Install the TIMING BELT.

2) Put the TIMING BELT onto the TENSION ROLLER, slide the SS BRAKE BASE into position and install 2 screws(M).

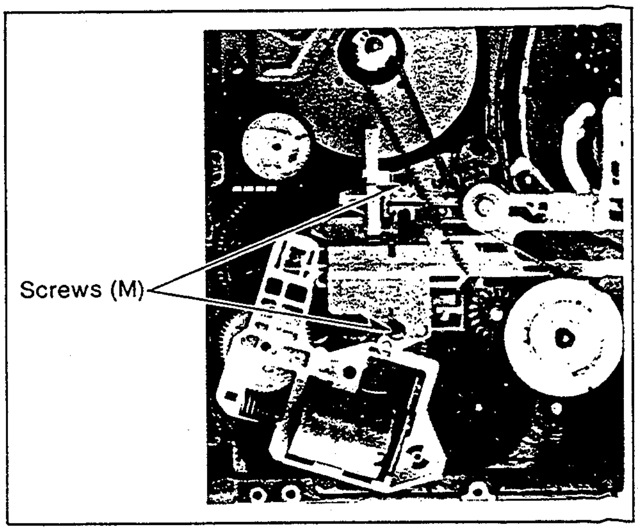


Fig. K12

2–5–13. ASSEMBLY OF THE PINCH ARM UNIT

1) Install the OPENER PIECE by inserting the boss into the PINCH ARM UNIT. Push down until the lock engages the shaft.

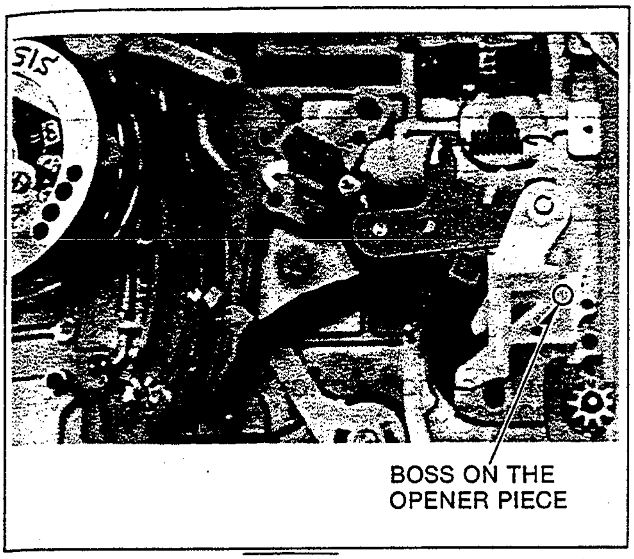


Fig. K13

2–5–14. CHECKING THE MECHANISM MOVEMENT

1) Check by moving the mechanism by hand then re–check using a battery to power the motor.

2) Rotate the LOADING MOTOR by hand in the loading direction while checking the movement of each gear. If the mechanism operates correctly when moved by hand, connect a battery to the LOADING MOTOR and re–check the movement of each gear as shown in Fig.S1/S2/S3.

3) Connect the battery to check the loading operation and then reverse the battery connection to check the unloading operation.

4) Reverse the battery to move the mechanism to the cassette down position.

2–5–15. ASSEMBLY OF THE CASSETTE HOLDER

1. ASSEMBLE A CASSETTE HOLDER AS AN UNIT

1) Put the CASSETTE HOLDER into the cassette up condition by moving the WIPER ARM.
2) Turn the LOADING MOTOR by hand in the unloading direction until the CARRIAGE CONNECTION GEAR and the MODE SW is eject position as shown in Fig.K14/K15

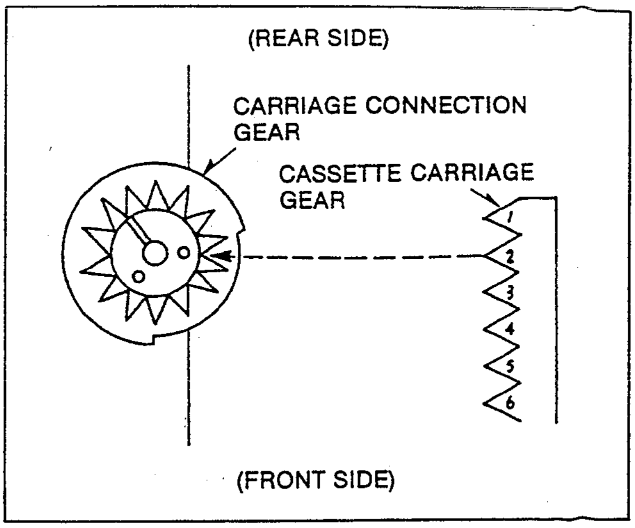


Fig. K14

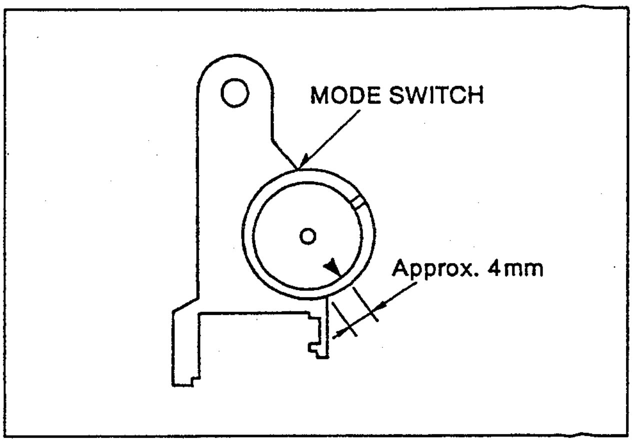


Fig. K15

3) Install the CASSETTE HOLDER UNIT as shown in Fig.K14.
4) Install 4 screws to attach the CASSETTE HOLDER UNIT.

<Eject Operation>

The main cam gear rotates in the direction of the arrow. The projection (B) of the carriage connection gear engages with the recession (A) of the main cam gear. The carriage connection gear rotates in the direction of the arrow to perform the Eject operation.

<NOTE>
If the Eject operation is performed without the cassette carriage installed while repairing or making the mechanical phase alignment, the main cam gear will not engage with the carriage connection gear will not rotate.
For performing the Eject operation with the cassette carriage not installed, it is necessary to rotate to the carriage connection gear by hand in the direction of the arrow.

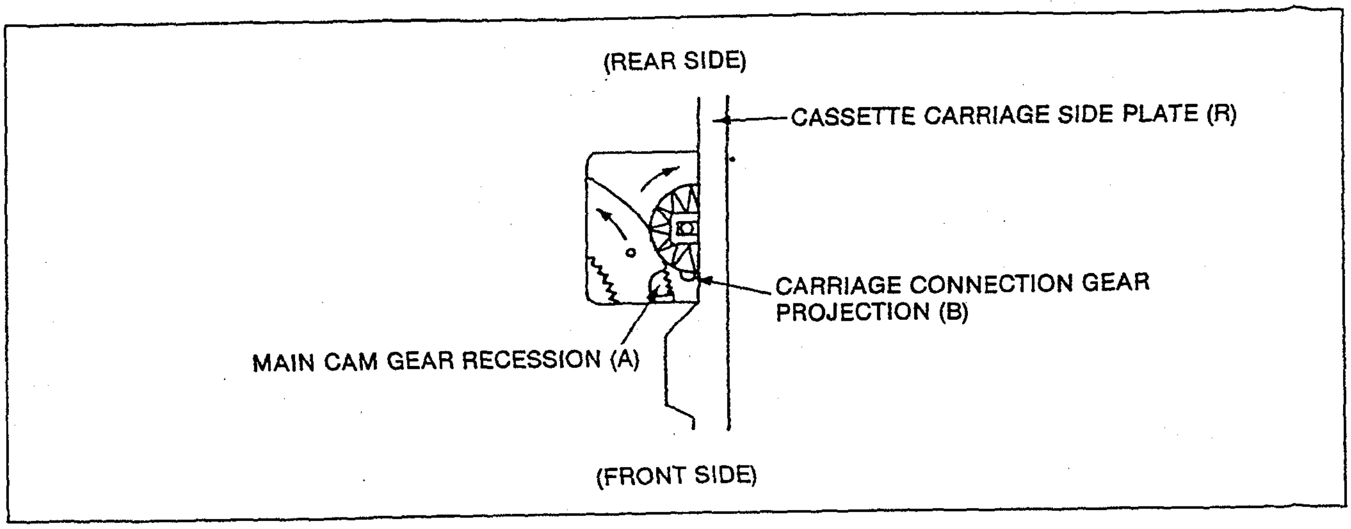

(REAR SIDE)
CASSETTE CARRIAGE SIDE PLATE (R)
CARRIAGE CONNECTION GEAR PROJECTION (B)
MAIN CAM GEAR RECESSION (A)
(FRONT SIDE)

Fig. K16 Top View of Eject Operation

2. ASSEMBLE A CASSETTE HOLDER SEPARATELY

1) Put the CASSETTE HOLDER into the cassette down position by moving the WIPER ARM. Check the position of the WIPER ARM and RACK A. The mark of RACK A aligns with the mark on the WIPER ARM.

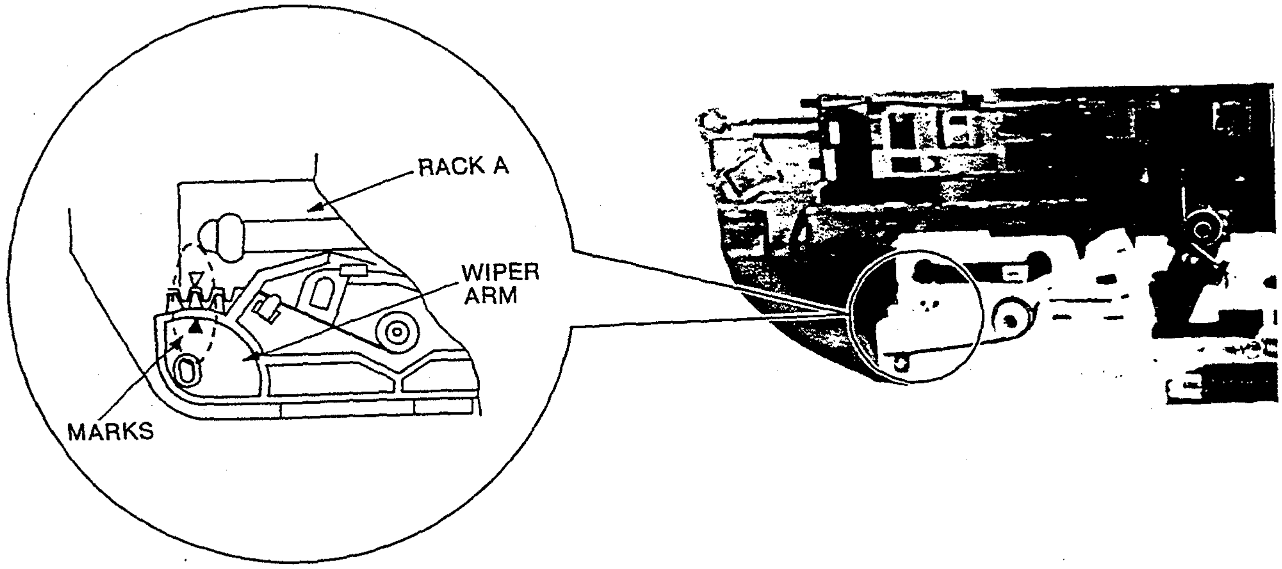

RACK A
WIPER ARM
MARKS

Fig. K17

2) Install the SIDE PLATE ASSEMBLY so that the first gear of RACK B aligns with the mark on the CARRIAGE CONNECTION GEAR.

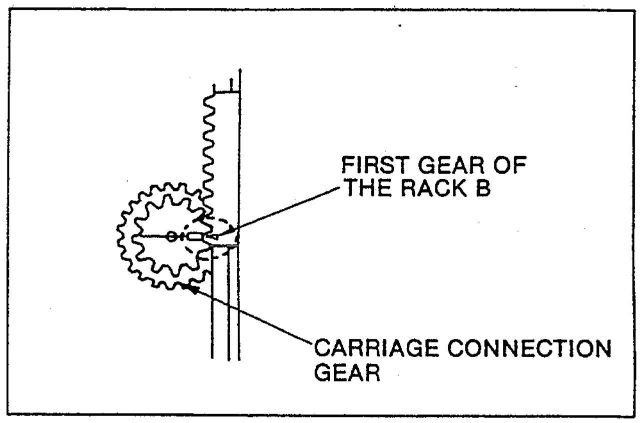


Fig. K18

3) Install 4 screws to attach the SIDE PLATE ASSEMBLY.

4) Turn the LOADING MOTOR by hand to the cassette up position while pushing the WIPER ARM to the cassette up position.

5) Insert the 5 posts on the CASSETTE HOLDER into the Side Plate.

6) Set the TOP PLATE on the Side Plate then push it down until it locks.

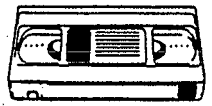
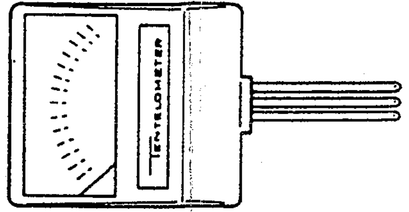
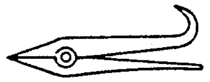
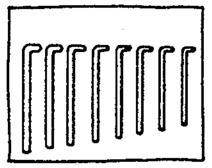
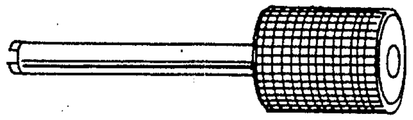
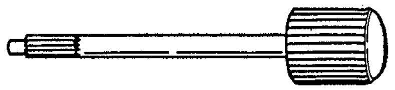
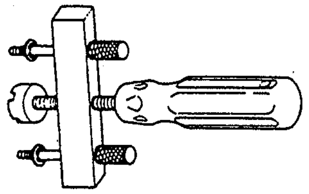
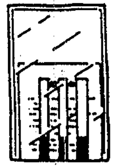
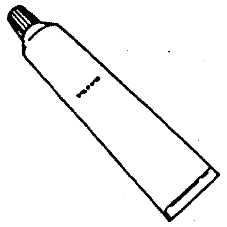
2-5-16. ASSEMBLY OF THE MECHANISM CHASSIS

1) Install the MECHANISM CONNECTION C.B.A. onto the chassis. Then install the chassis into the frame and connect all the cables and connectors.

2) Clean the DD CYLINDER after reinstallation.

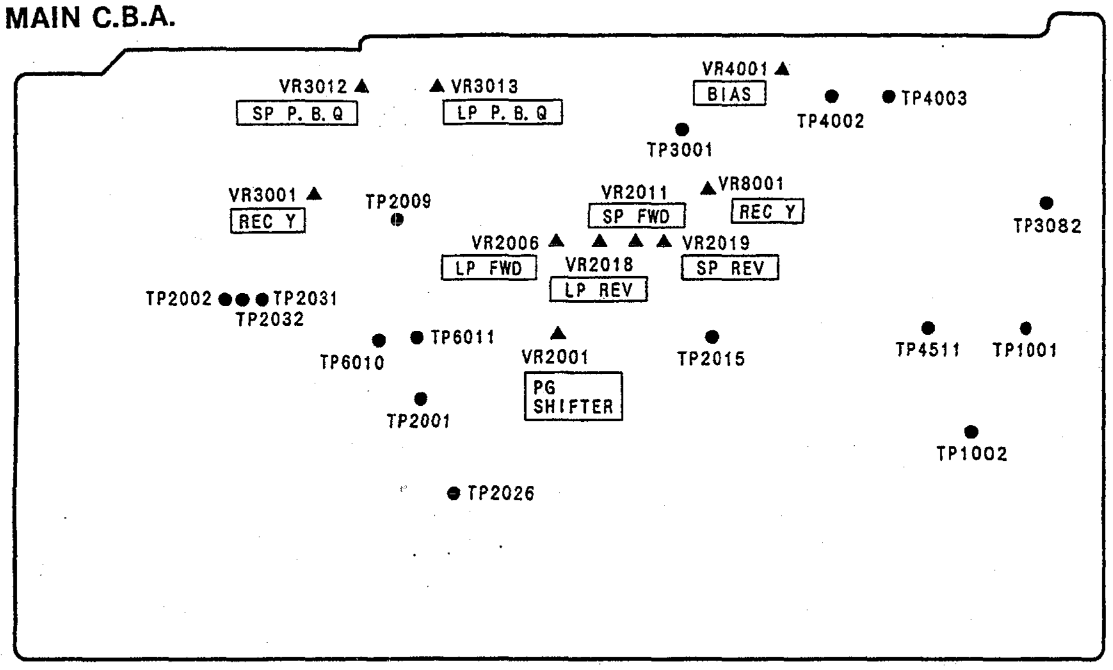
3) Insert a cassette and adjust the tape travel and check all the operation modes.

Servicing Fixtures & Tools

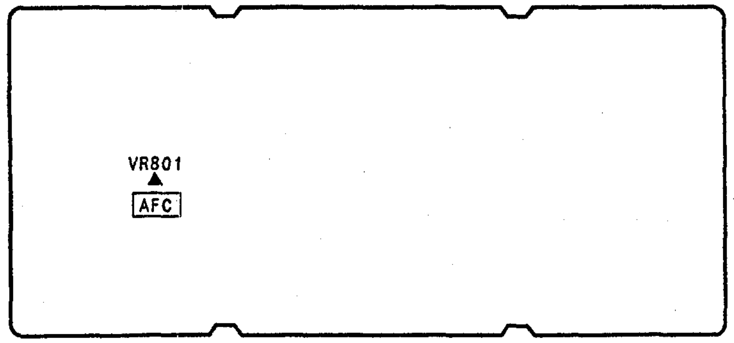
VFJ8125H3F PAL VHS Alignment Tape VFM8080HQFP NTSC VHS Alignment Tape 	VFK0132 Back Tension Meter (Tentelometer, Made in U.S.A.) 	VFK0335 Retaining Ring Remover (3mm/4mm) 
VFK0326 Hex. Wrench Set (0.7, 0.9, 1.2, 1.5, 1.6, 2.0, 2.4, 3.0mm) 	VFK0329 Post Adjustment Screw Driver 	VFK0330 Fine Adjustment Gear Driver 
VFK0341 Upper Cylinder Remover 	VFK27 Hand Cleaning Stick 	MOR265 Morlytone Grease 

LOCATION OF TEST POINTS & CONTROLS

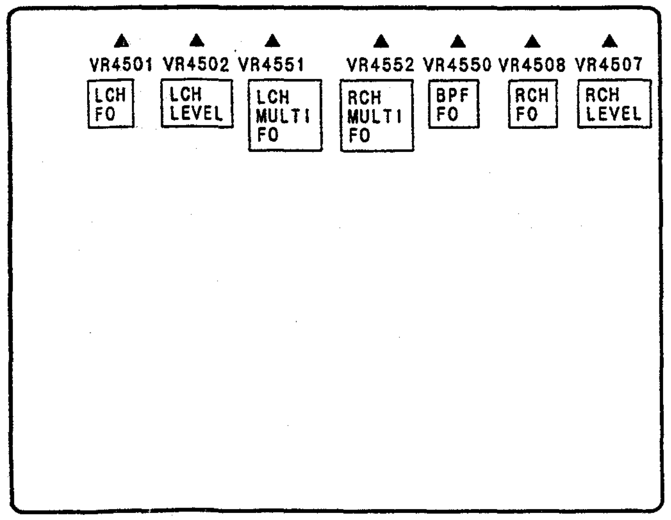
MAIN C.B.A.


VR3012
SP P.B.Q
VR3013
LP P.B.Q
VR4001
BIAS
TP4002
TP4003
TP3001
VR3001
REC Y
TP2009
VR2011
SP FWD
VR8001
REC Y
TP3082
VR2006
LP FWD
VR2018
LP REV
VR2019
SP REV
TP2002
TP2031
TP2032
TP6010
TP6011
VR2001
PG SHIFTER
TP2015
TP4511
TP1001
TP2001
TP1002
TP2026

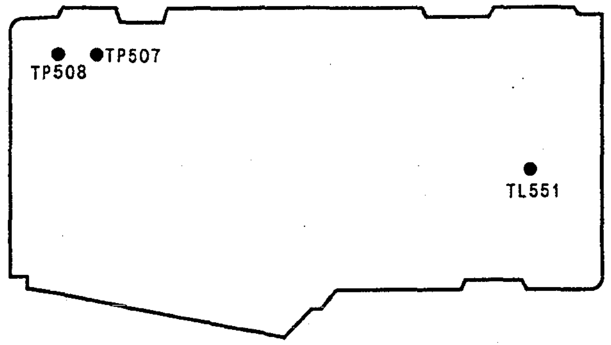
LUMINANCE & CHROMINANCE PACK C.B.A.



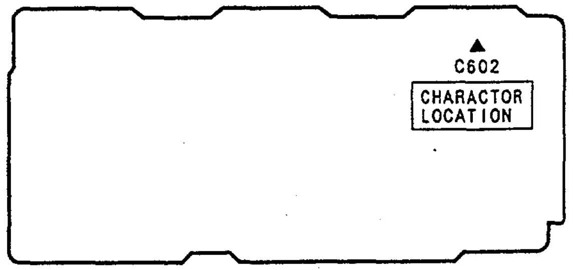
Hi-Fi AUDIO PACK C.B.A.


VR4501
LCH FO
VR4502
LCH LEVEL
VR4551
LCH MULTI FO
VR4552
RCH MULTI FO
VR4550
BPF FO
VR4508
RCH FO
VR4507
RCH LEVEL

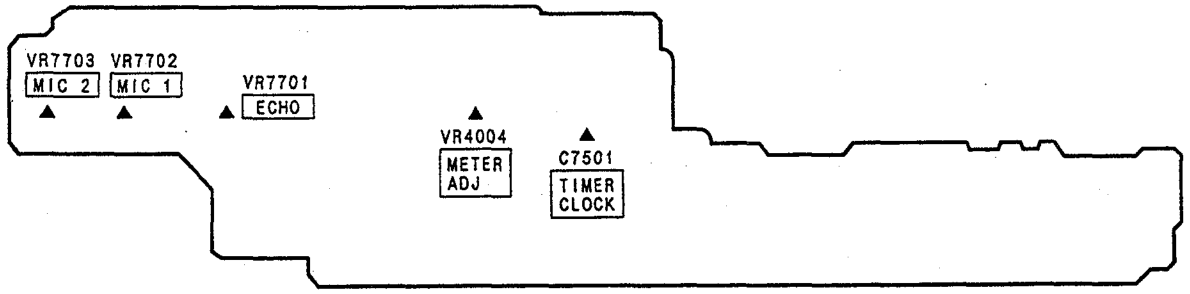
HEAD AMP C.B.A.


TP508
TP507
TL551

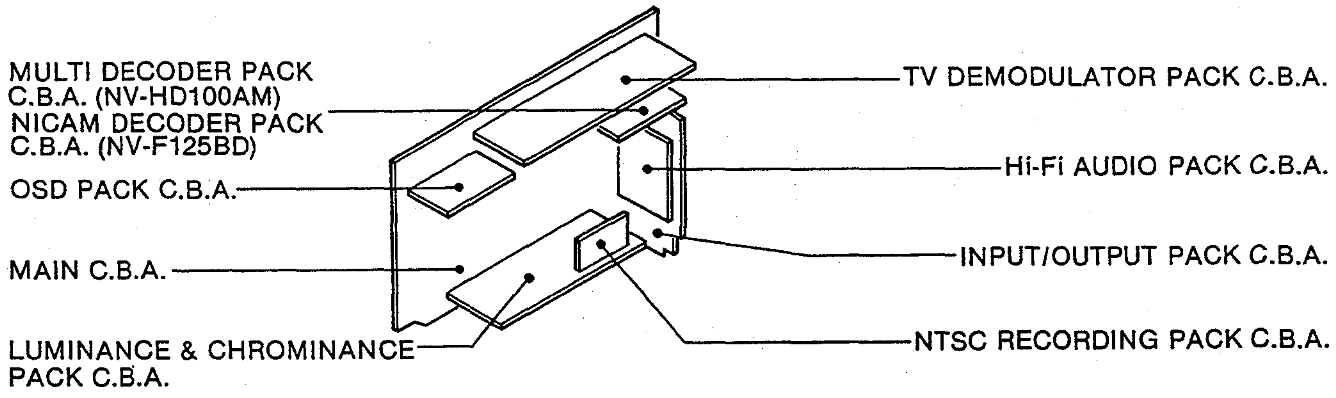
OSD PACK C.B.A.

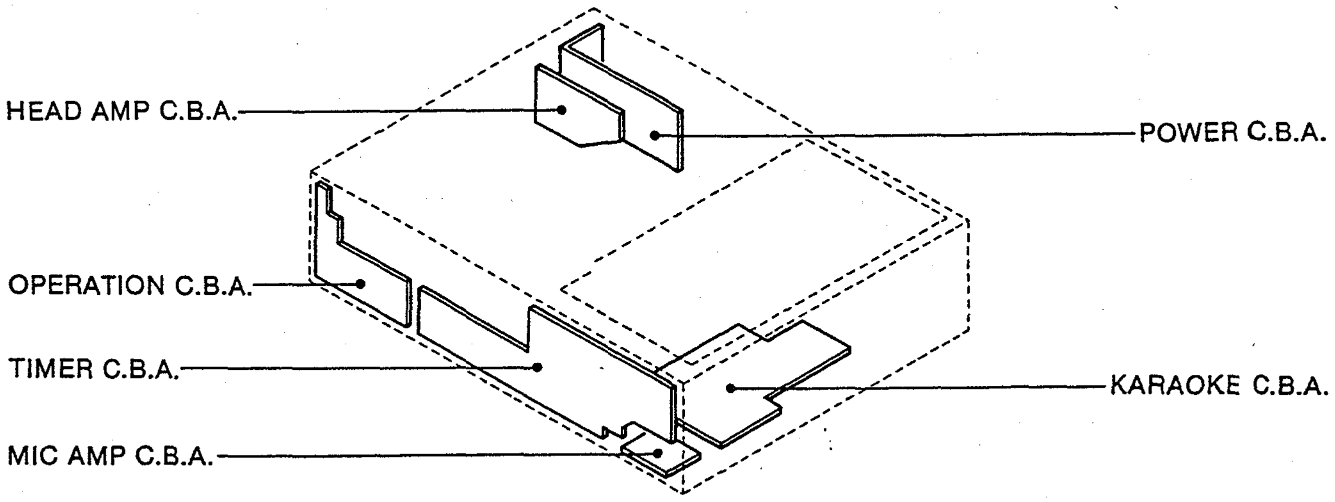

C602
CHARACTOR LOCATION

TIMER C.B.A.


VR7703
MIC 2
VR7702
MIC 1
VR7701
ECHO
VR4004
METER ADJ
C7501
TIMER CLOCK

CIRCUIT BOARD LAYOUT


MULTI DECODER PACK C.B.A. (NV-HD100AM)
NICAM DECODER PACK C.B.A. (NV-F125BD)
OSD PACK C.B.A.
MAIN C.B.A.
LUMINANCE & CHROMINANCE PACK C.B.A.
TV DEMODULATOR PACK C.B.A.
Hi-Fi AUDIO PACK C.B.A.
INPUT/OUTPUT PACK C.B.A.
NTSC RECORDING PACK C.B.A.


HEAD AMP C.B.A.
OPERATION C.B.A.
TIMER C.B.A.
MIC AMP C.B.A.
POWER C.B.A.
KARAOKE C.B.A.

2-6. ELECTRICAL ADJUSTMENT PROCEDURES

This section provides complete adjustment procedures required for electric circuits of VHS Video Cassette Recorders.

2-6-1. TEST EQUIPMENT

To perform electrical adjustments following equipment is required.

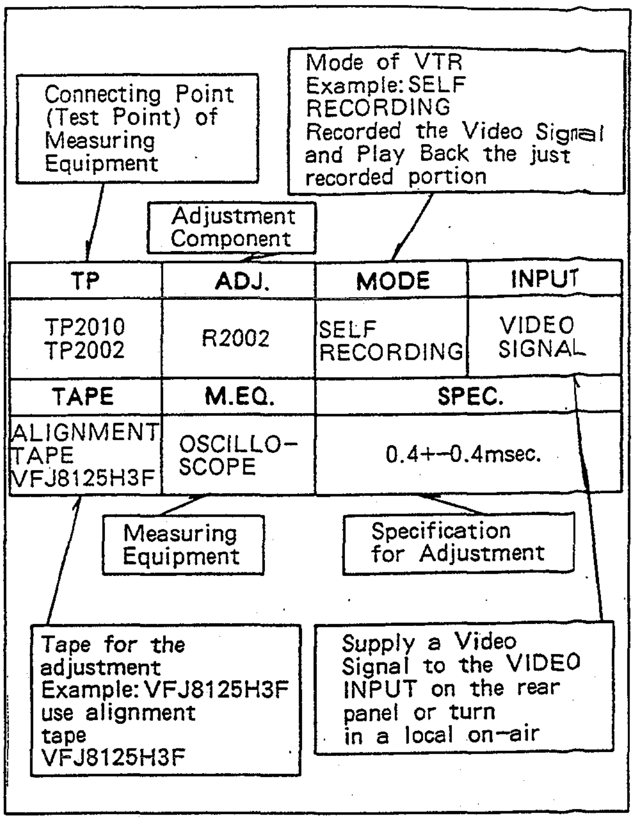
1. Dual-Trace Oscilloscope. (More than 35 MHz)
   Voltage Range: 0.005–5V/div
   Frequency Range: DC–35MHz
   Probes: 10:1
2. Frequency Counter.
   Frequency Range: 0–10MHz
   Probes: 1:1
3. Universal Counter.
4. Vacuum Tube Volt Meter. (V.T.V.M.)
5. Video Sweep Generator.
6. Sine Wave Generator.
7. Video Pattern Generator.
8. VHS Alignment Tape. (VFJ8125H3F)
9. VHS Blank Tape.
10. Monitor.
11. Plastic Tip Driver.

2-6-2. PREPARATION

During adjustment, set each selector as follows: when no indication in the procedure.

NOISE FILTER SW.....OFF
SYSTEM SW.....PAL
TAPE SPEED.....SP

2-6-3. HOW TO READ ADJUSTMENT PROCEDURES



Connecting Point (Test Point) of Measuring Equipment

Adjustment Component

Mode of VTR
Example: SELF RECORDING
Recorded the Video Signal and Play Back the just recorded portion

TP	ADJ.	MODE	INPUT
TP2010 TP2002	R2002	SELF RECORDING	VIDEO SIGNAL
TAPE	**M.EQ.**	**SPEC.**	
ALIGNMENT TAPE VFJ8125H3F	OSCILLO-SCOPE	0.4+-0.4msec.	

Measuring Equipment

Specification for Adjustment

Tape for the adjustment
Example: VFJ8125H3F use alignment tape VFJ8125H3F

Supply a Video Signal to the VIDEO INPUT on the rear panel or turn in a local on-air

Fig. E1

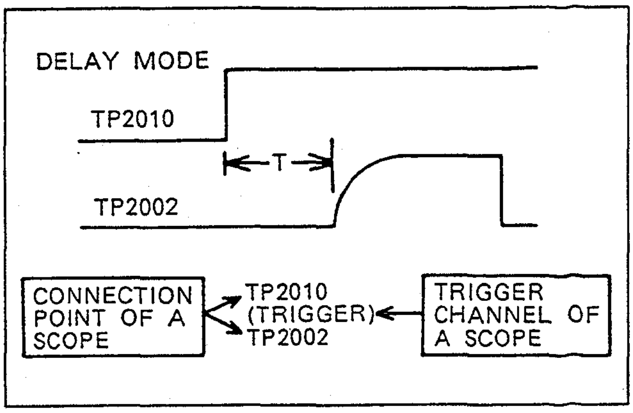


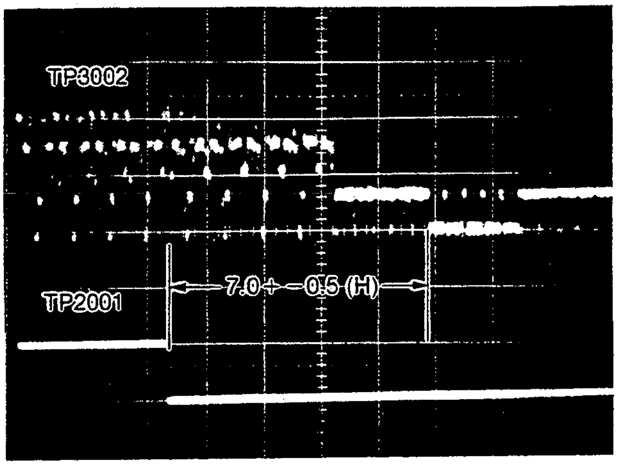
Fig. E2

SERVO SECTION

2-6-4. PG SHIFTER ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP2001 TP3002	VR2001	PLAYBACK	
TAPE	**M. EQ.**	**SPEC.**	
ALIGNMENT TAPE VFJ8125H3F	OSCILLO-SCOPE	7.0+-0.5(H)	

1. Connect the oscilloscope to TP2001(H.SW) and TP3002(V.OUT)
2. Playback the alignment tape.
3. Adjust VR2001 until the phase difference between falling edge of Head SW pulse and V-Sync is 7.0+-0.5(H)



TP3002 VIDEO
TP2001 H. SW (TRIGGER)

Fig. E3

2-6-5. SLOW TRACKING ADJUSTMENT

TP	ADJ.	MODE	INPUT
MONITOR SCREEN	VR2011(SP) VR2006(LP)	SP (SELF RECORDED) STILL	COLOUR BAR
TAPE	**M. EQ.**	**SPEC.**	
BLANK TAPE	MONITOR TV	A=B (A+B)/V<1/6	

1. Connect a cut jumper wire as shown in Fig.E4.
2. Record the colour bar in SP(LP) mode for a few minutes and playback the just recorded portion.
3. Place the unit in SLOW mode by operating the Remote Controller Unit.
4. Adjust VR2011(SP)(VR2006(LP)) until noise bar on the monitor screen is minimized. (Detail specifications are shown in Fig.E5)
5. Disconnect a jumper wire.

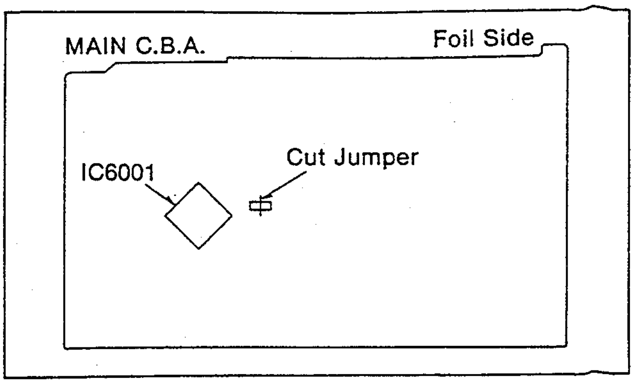


Fig. E4

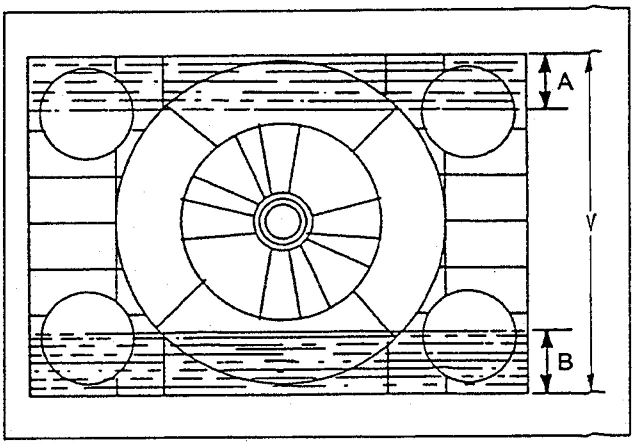


Fig. E5

2-6-6. REVERSE SLOW TRACKING ADJUSTMENT

TP	ADJ.	MODE	INPUT
MONITOR SCREEN	VR2019(SP) VR2018(LP)	REVERSE SLOW	COLOUR BAR
TAPE	**M. EQ.**	**SPEC.**	
BLANK TAPE	MONITOR	SP: A=B (A+B)/V=<1/6 LP: B=O A/V=<1/12	

1. Connect a cut jumper wire as shown in Fig.E4.
2. Record the colour bar in SP(LP) mode for a few minutes and playback the just recorded portion.
3. Place the unit in SLOW mode by operating the Remote Controller Unit.
4. Adjust VR2019(SP)(VR2018(LP)) until noise bar on the monitor screen is minimized. (Detail specifications are shown in Fig.E5)
5. Disconnect the jumper wire.

LUMINANCE & CHROMINANCE SECTION

2-6-7. ARTIFICIAL NTSC AFC FREE RUN ADJUSTMENT

TP	ADJ.	MODE	INPUT
PIN (9) of IC802	VR803	STOP	SINEWAVE 8KHz −10dB (316mV)
TAPE	**M. EQ.**	**SPEC.**	
	FREQUENCY COUNTER SINEWAVE GENERATOR	15735+−100(Hz)	

Note: Supply +5V DC to Pin 27 of IC802.

1. Supply a sinewave (8KHz/−10dB) to Line In. (Video In)
2. Connect the frequency counter to Pin 9 of IC802.
3. Turn VR803 to maximum frequency.
4. Adjust VR803 until frequency is 15735+−100(Hz).

2-6-8. RECORDING CURRENT ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP507(HOT) TP508(GND)	VR3001(Y) VR8001(C)	RECORDING	COLOUR BAR
TAPE	**M. EQ.**	**SPEC.**	
BLANK TAPE	OSCILLO-SCOPE	Y:130+−5(mVp−p) C:32+−2(mVp−p)	

1. Record the colour bar.
2. Connect the oscilloscope to TP507(HOT) and TP508(GND).
3. Adjust VR3001 so the amplitude of sync tip portion is 130+−5mVp−p.
4. Supply +5V DC to PP3001−6 to reduce luminance component.
5. Adjust VR8001 until the amplitude of Cyan is 32+−2mVp−p.

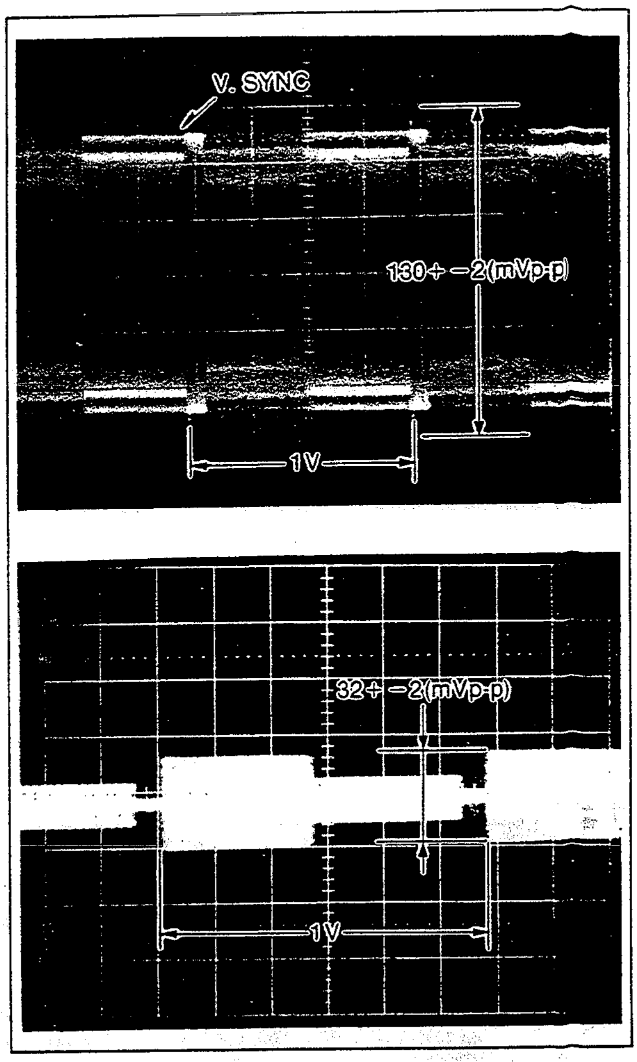


Fig. E6

2-6-9. VIDEO FREQUENCY RESPONSE ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP3002	VR3012(SP) VR3013(LP)	(SELF RECORDED) PLAYBACK (SP/LP)	VIDEO SWEEP SIGNAL
TAPE	**M. EQ.**	**SPEC.**	
BLANK TAPE	OSCILLO-SCOPE VIDEO SWEEP GENERATOR	SP:0+−1(dB) (90 − 110%) LP:0+−1(dB) (90 − 110%)	

Note:

(1) Set the Video Sweep Signal as shown in Fig.E7.

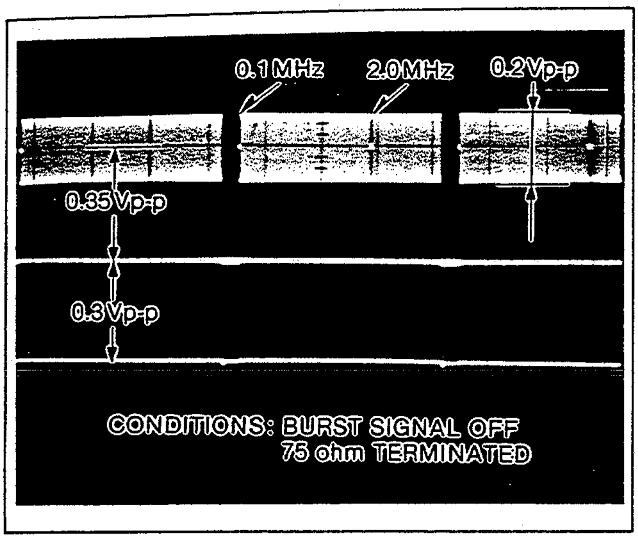


Fig. E7

1. Record the Video Sweep Signal in SP/(LP) mode for a few minutes and playback the just recorded signal.
2. Connect the oscilloscope to TP3002.
3. Adjust VR3012(SP)(VR3013(LP)) until the frequency response level is 0+-1dB at 2MHz portion by comparing with 0.1MHz portion.

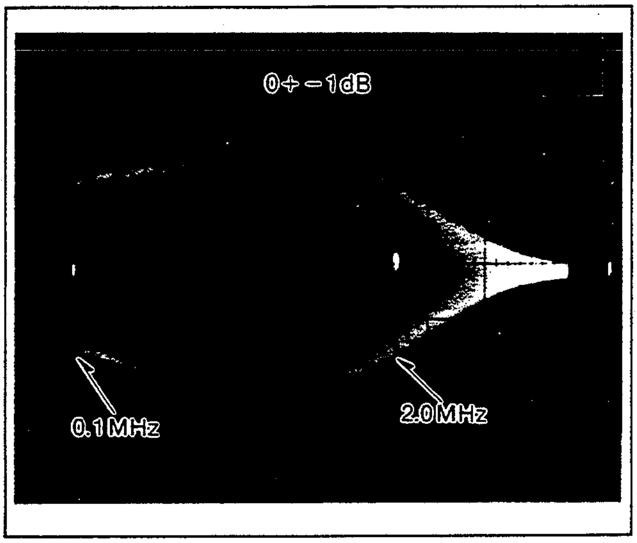


Fig. E8

AUDIO SECTION

2-6-10. BIAS CURRENT ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP4002 (HOT) TP4003 (GND)	VR4001	RECORDING	
TAPE	**M. EQ.**	**SPEC.**	
BLANK TAPE	V.T.V.M.	2.8+-0.1(mVrms)	

Note:
Connect the Audio input and GND.

1. Place the unit in SP recording mode.
2. Connect the V.T.V.M. to TP4002(HOT) and TP4003(GND).
3. Adjust VR4002 so reading of V.T.V.M. is 3.0+-0.1mVrms.

2-6-11. CARRIER FREQUENCY ADJUSTMENT

TP	ADJ.	MODE	INPUT
IC4501-34 (L) IC4501-47 (R)	VR4501 (L) VR4509 (R) VR4551 (L) VR4552 (R)	SP RECORDING	
TAPE	**M. EQ.**	**SPEC.**	
BLANK TAPE	FREQUENCY COUNTER	NTSC-L: 1.3+- 0.003 (MHz) NTSC-R: 1.7+- 0.003 (MHz) PAL-L: 1.4+- 0.003 (MHz) PAL-R: 1.8+- 0.003 (MHz)	

1. Place the unit in SP recording mode.
2. Set the VTR system SW on the front panel to 3.58 NTSC.
3. Connect the frequency counter to IC4501-34.
4. Adjust VR4501 until the frequency is 1.3+- 0.003 MHz.
5. Connect the frequency counter to IC4501-47.
6. Adjust VR4509 until the frequency is 1.7+- 0.003 MHz.
7. Set the VTR system SW on the front panel to the PAL position.
8. Connect the frequency counter to IC4501-34.
9. Adjust VR4551 until the frequency is 1.4+- 0.003 MHz.
10. Connect the frequency counter to IC4501-47.
11. Adjust VR4552 until the frequency is 1.8+- 0.003 MHz.

2–6–12. DEVIATION ADJUSTMENT

TP	**ADJ.**	**MODE**	**INPUT**
IC4501–34 (L) IC4501–47 (R)	VR4502 (L) VR4507 (R)	SP RECORDING	1 kHz, –10dB AUDIO SIGNAL
TAPE	**M. EQ.**	**SPEC.**	
BLANK TAPE	VTVM/ SINEWAVE GENERATOR	120 (mVrms)	

1. Set the VTR system SW on the front panel to PAL.
2. Set the output level of the Signal Generator to 1kHz/–10dB and supply it to both audio input terminals (L) and (R).
3. Adjust the recording level (Line output) with Hi–Fi Rec Level VR on the front panel until both audio outputs (L) and (R) are 400mVrms (VTVM).
4. Connect the VTVM between VR4502 and R4511.
5. Adjust VR4502 until the level is 120mVrms.
6. Connect the VTVM between VR4507 and R4561.
7. Adjust VR4507 until the level is 120mVrms.

2–6–13. FM B.P.F. ADJUSTMENT

TP	**ADJ.**	**MODE**	**INPUT**
IC4501–33 (L) IC4501–48 (R)	VR4550	PLAYBACK	1.505 MHz (NTSC) 1.608 MHz (PAL) 400mVp–p SINEWAVE SIGNAL
TAPE	**M. EQ.**	**SPEC.**	
NTSC RECORDED TAPE	OSCILLO–SCOPE/ SINEWAVE GENERATOR	L ch= R ch	

1. Set the VTR system SW to PAL position.
2. Disconnect P551 (from Main C.B.A. to Head Amp Pack)
3. Set the output of the Signal Generator to 1.608 MHz/400mVp–p and supply it to PS4003–8.
4. Playback a NTSC recorded tape.
5. Connect the oscilloscope to IC4501–33 and 48. (Connect the GND terminal for the oscilloscope to GND of FM Pack to reduce the noise.)
6. Adjust VR4550 until the L ch (pin 33) and R ch (pin 48) are the same level.
7. Set the VTR system SW to NTSC position and repeat the same procedure (4.5.6.) again.
8. After this adjustment, connect P551.

TIMER SECTION

2–6–14. TIMER REFERENCE CLOCK ADJUSTMENT

TP	**ADJ.**	**MODE**	**INPUT**
IC7501–28	C7501	STOP	
TAPE	**M. EQ.**	**SPEC.**	
	UNIVERSAL COUNTER	7812.5+–0.015(usec)	

1. Connect the universal counter to IC7501–28.
2. Adjust C7501 so the reading of universal counter is 7812.5+–0.0151usec.

OSD SECTION

2-6-15 OSD CHARACTER LOCATION ADJUSTMENT

TP	ADJ.	MODE	INPUT
LINE OUT	C601	STOP	
TAPE	**M. EQ.**	**SPEC.**	
	OSCILLO-SCOPE	T=36+-1(usec)	

1. Set the KARAOKE SW to ON position
2. Connect the oscilloscope to the line-out on the back side.
3. Check the waveform of the 74th horizontal signal by using a delay mode.(Fig. E9/E10)
4. Adjust the C601 until the time difference between the rising edge of the blue part and falling edge of the white part is 36+-1(usec) (Fig. E10)

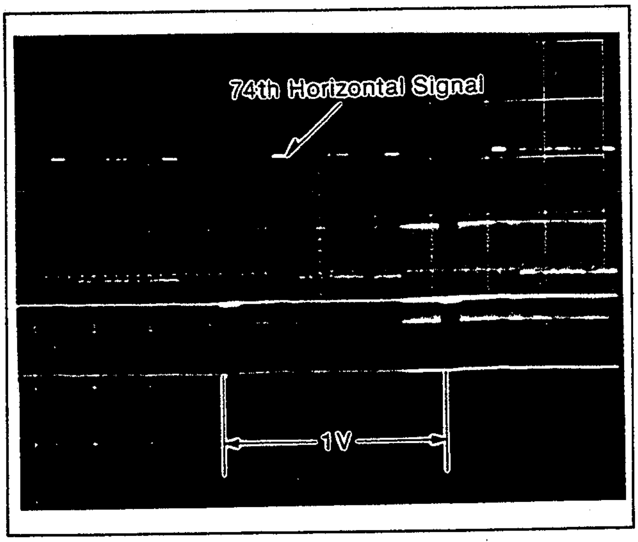

74th Horizontal Signal
1V

Fig. E9

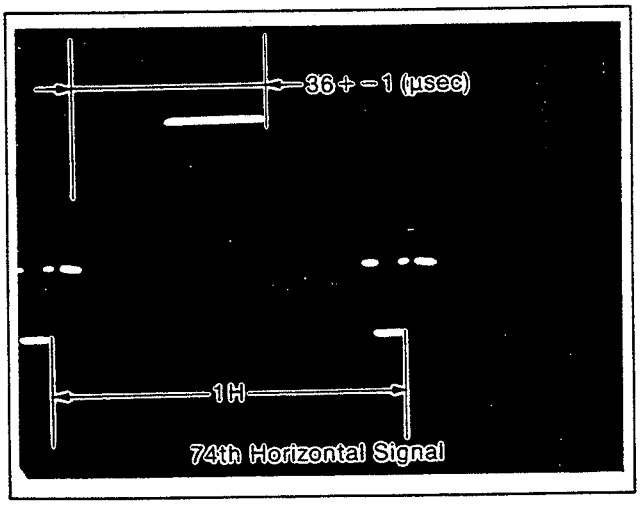
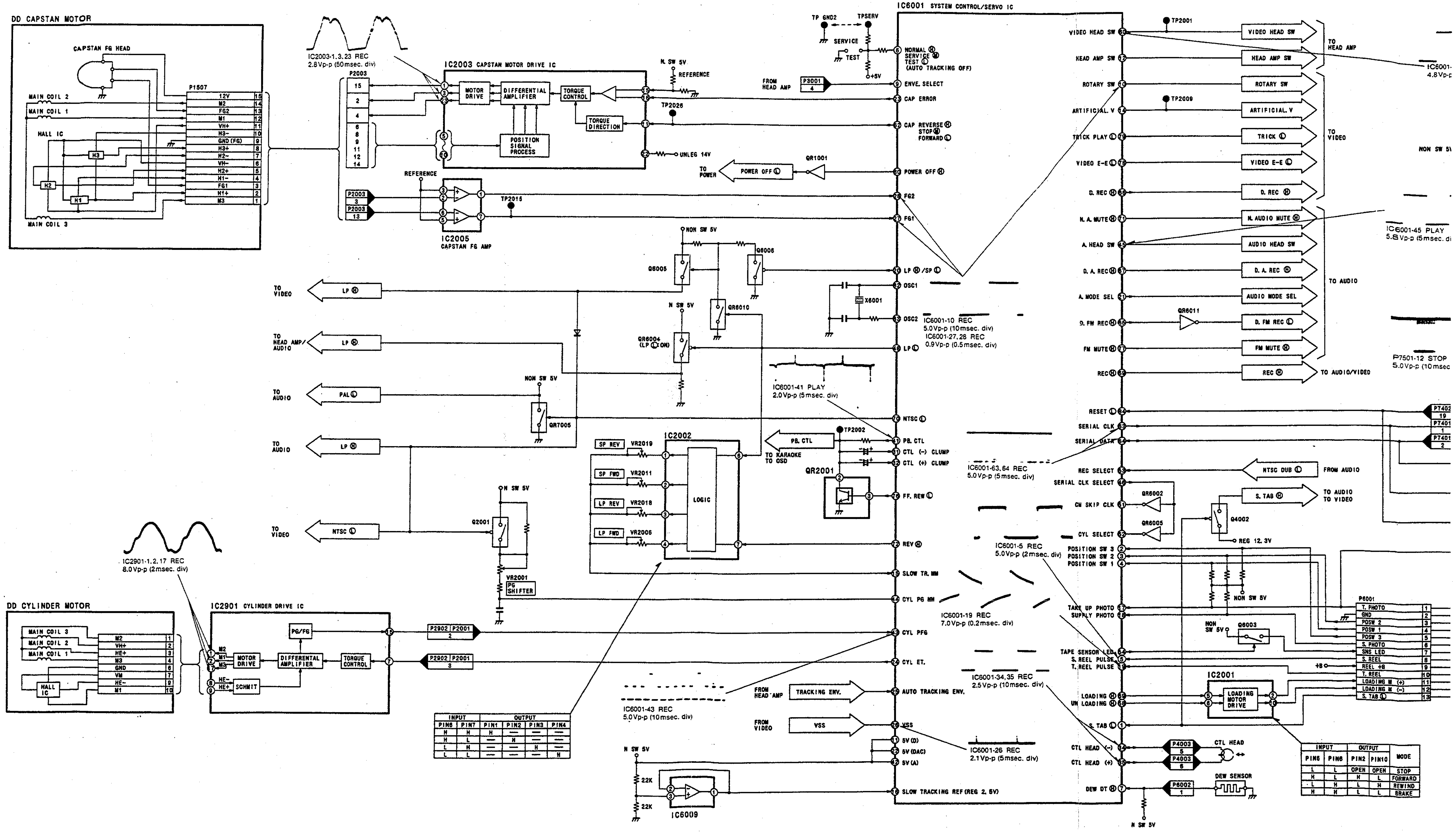

36+−1 (µsec)
1H
74th Horizontal Signal

Fig. E10

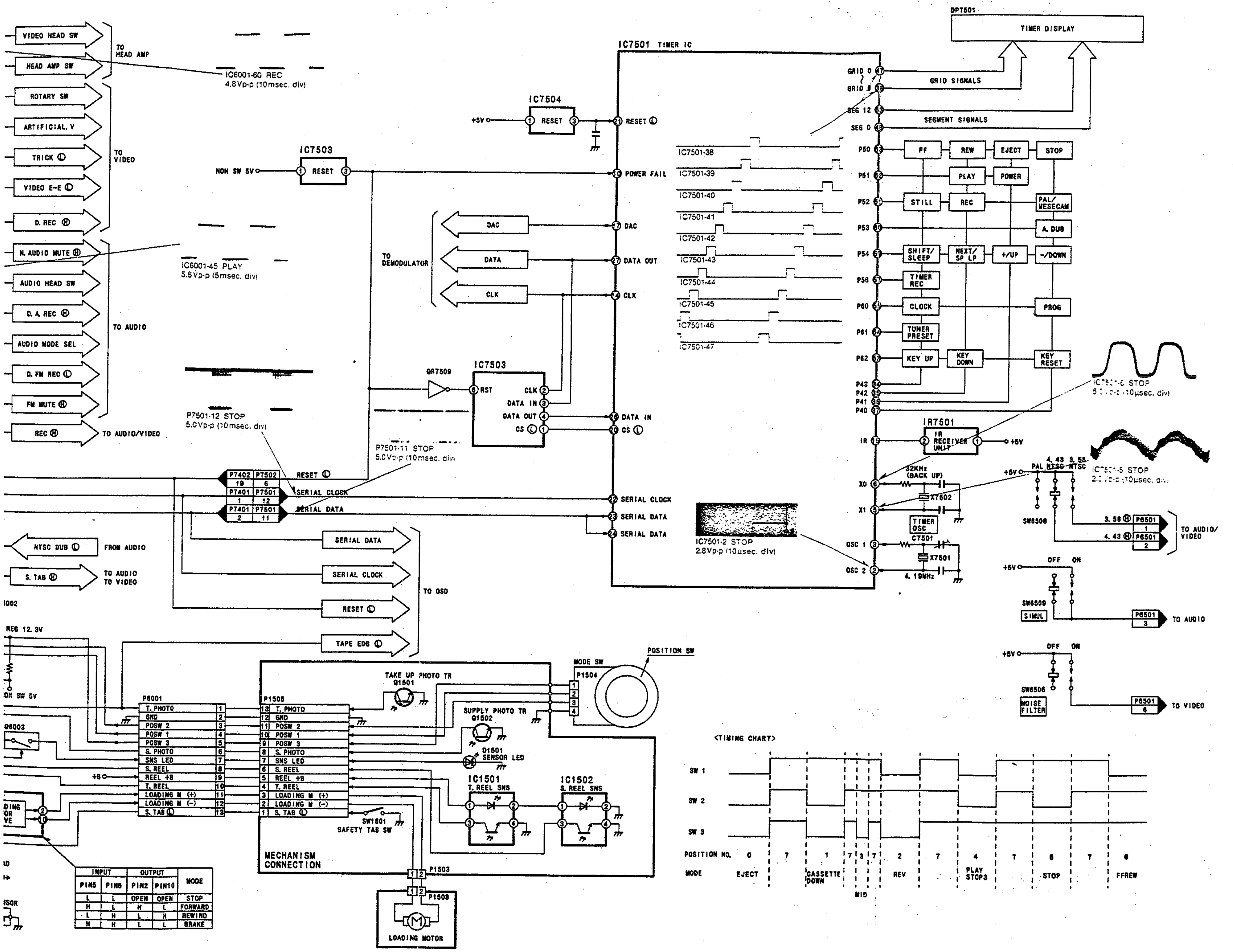
SECTION 3
BLOCK DIAGRAMS

3-1. SYSTEM CONTROL & SERVO BLOCK DIAGRAM


DD CAPSTAN MOTOR
CAPSTAN FG HEAD
MAIN COIL 2
MAIN COIL 1
HALL IC
H3
H2
H1
MAIN COIL 3
P1507
12V 15
M2 14
FG2 13
M1 12
VH+ 11
H3- 10
GND (FG) 9
H3+ 8
H2- 7
VH- 6
H2+ 5
H1- 4
FG1 3
H1+ 2
M3 1
IC2003-1,3,23 REC
2.8Vp-p (50msec. div)
P2003
IC2003 CAPSTAN MOTOR DRIVE IC
MOTOR DRIVE
DIFFERENTIAL AMPLIFIER
TORQUE CONTROL
TORQUE DIRECTION
POSITION SIGNAL PROCESS
N. SW 5V
REFERENCE
TP2026
UNLEG 14V
REFERENCE
P2003 3
P2003 13
TP2015
IC2005
CAPSTAN FG AMP
TO POWER
POWER OFF Ⓛ
QR1001
FROM HEAD AMP
P3001 4
TP GND2
TPSERV
SERVICE
TEST
+5V
IC6001 SYSTEM CONTROL/SERVO IC
NORMAL Ⓗ
SERVICE Ⓜ
TEST Ⓛ
(AUTO TRACKING OFF)
ENVE. SELECT
CAP ERROR
CAP REVERSE Ⓗ
STOP Ⓜ
FORWARD Ⓛ
POWER OFF Ⓗ
FG2
FG1
NON SW 5V
Q6005
Q6006
LP Ⓗ /SP Ⓛ
OSC1
X6001
OSC2
LP Ⓛ
N SW 5V
QR6010
QR6004
(LP Ⓛ ON)
TO VIDEO
LP Ⓗ
TO HEAD AMP/AUDIO
LP Ⓗ
TO AUDIO
PAL Ⓛ
NON SW 5V
QR7005
TO AUDIO
LP Ⓗ
TO VIDEO
NTSC Ⓛ
N SW 5V
Q2001
VR2001
PG SHIFTER
IC6001-10 REC
5.0Vp-p (10msec. div)
IC6001-27,28 REC
0.9Vp-p (0.5msec. div)
IC6001-41 PLAY
2.0Vp-p (5msec. div)
NTSC Ⓛ
TP2002
PB. CTL
TO KARAOKE
TO OSD
PB. CTL
CTL (-) CLUMP
CTL (+) CLUMP
QR2001
FF. REW Ⓛ
IC2002
SP REV VR2019
SP FWD VR2011
LP REV VR2018
LP FWD VR2006
LOGIC
REV Ⓗ
SLOW TR. MM
CYL PG MM
CYL PFG
CYL ET.
AUTO TRACKING ENV.
FROM HEAD AMP
TRACKING ENV.
FROM VIDEO
VSS
5V (D)
5V (DAC)
5V (A)
SLOW TRACKING REF (REG 2. 5V)
N SW 5V
22K
22K
IC6009
IC2901-1,2,17 REC
8.0Vp-p (2msec. div)
DD CYLINDER MOTOR
MAIN COIL 3
MAIN COIL 2
MAIN COIL 1
HALL IC
M2 1
VH+ 2
HE+ 3
M3 4
GND 6
VM 7
HE- 9
M1 10
IC2901 CYLINDER DRIVE IC
PG/FG
MOTOR DRIVE
DIFFERENTIAL AMPLIFIER
TORQUE CONTROL
SCHMIT
P2902 P2001 2
P2902 P2001 3
IC6001-43 REC
5.0Vp-p (10msec. div)
IC6001-19 REC
7.0Vp-p (0.2msec. div)
IC6001-34,35 REC
2.5Vp-p (10msec. div)
IC6001-26 REC
2.1Vp-p (5msec. div)
IC6001-63,64 REC
5.0Vp-p (5msec. div)
IC6001-5 REC
5.0Vp-p (2msec. div)
TP2001
TP2009
VIDEO HEAD SW
HEAD AMP SW
ROTARY SW
ARTIFICIAL. V
TRICK PLAY Ⓛ
VIDEO E-E Ⓛ
D. REC Ⓗ
N. A. MUTE Ⓗ
A. HEAD SW
D. A. REC Ⓗ
A. MODE SEL
D. FM REC Ⓗ
FM MUTE Ⓗ
REC Ⓗ
VIDEO HEAD SW
HEAD AMP SW
TO HEAD AMP
ROTARY SW
ARTIFICIAL. V
TRICK Ⓛ
VIDEO E-E Ⓛ
D. REC Ⓗ
TO VIDEO
N. AUDIO MUTE Ⓗ
AUDIO HEAD SW
D. A. REC Ⓗ
AUDIO MODE SEL
QR6011
D. FM REC Ⓛ
FM MUTE Ⓗ
TO AUDIO
REC Ⓗ
TO AUDIO/VIDEO
IC6001-
4.8Vp-p
NON SW 5V
IC6001-45 PLAY
5.8Vp-p (5msec. div)
P7501-12 STOP
5.0Vp-p (10msec)
RESET Ⓛ
SERIAL CLK
SERIAL DATA
P7402 19
P7401 1
P7401 2
REC SELECT
SERIAL CLK SELECT
CH SKIP CLK
CYL SELECT
NTSC DUB Ⓛ
FROM AUDIO
S. TAB Ⓗ
TO AUDIO
TO VIDEO
QR6002
QR6005
Q4002
REG 12. 3V
POSITION SW 3
POSITION SW 2
POSITION SW 1
NON SW 5V
TAKE UP PHOTO
SUPPLY PHOTO
NON SW 5V
Q6003
TAPE SENSOR LED
S. REEL PULSE
T. REEL PULSE
+B
P6001
T. PHOTO 1
GND 2
POSW 2 3
POSW 1 4
POSW 3 5
S. PHOTO 6
SNS LED 7
S. REEL 8
REEL +B 9
T. REEL 10
LOADING M (+) 11
LOADING M (-) 12
S. TAB Ⓛ 13
IC2001
LOADING MOTOR DRIVE
LOADING Ⓗ
UN LOADING Ⓗ
S. TAB Ⓛ
CTL HEAD (-)
CTL HEAD (+)
P4003 5
P4003 6
CTL HEAD
DEW DT Ⓗ
P6002 1
DEW SENSOR
N SW 5V

INPUT		OUTPUT			
PIN6	PIN7	PIN1	PIN2	PIN3	PIN4
H	H	H	—	—	—
H	L	—	H	—	—
L	H	—	—	H	—
L	L	—	—	—	H

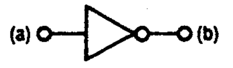
INPUT		OUTPUT		MODE
PIN5	PIN6	PIN2	PIN10	
L	L	OPEN	OPEN	STOP
H	L	H	L	FORWARD
L	H	L	H	REWIND
H	H	L	L	BRAKE


VIDEO HEAD SW
HEAD AMP SW
TO HEAD AMP
ROTARY SW
ARTIFICIAL. V
TRICK Ⓛ
VIDEO E-E Ⓛ
D. REC Ⓗ
TO VIDEO
N. AUDIO MUTE Ⓗ
AUDIO HEAD SW
D. A. REC Ⓗ
AUDIO MODE SEL
D. FM REC Ⓛ
FM MUTE Ⓗ
TO AUDIO
REC Ⓗ
TO AUDIO/VIDEO
IC6001-60 REC
4.8Vp-p (10msec. div)
IC6001-45 PLAY
5.8Vp-p (5msec. div)
P7501-12 STOP
5.0Vp-p (10msec. div)
P7501-11 STOP
5.0Vp-p (10msec. div)
IC7504
+5V
RESET
IC7503
NON SW 5V
RESET
DAC
DATA
CLK
TO DEMODULATOR
QR7509
IC7503
RST
CLK
DATA IN
DATA OUT
CS Ⓛ
P7402
P7502
19
6
P7401
P7501
1
12
P7401
P7501
2
11
RESET Ⓛ
SERIAL CLOCK
SERIAL DATA
NTSC DUB Ⓛ
FROM AUDIO
S. TAB Ⓗ
TO AUDIO
TO VIDEO
SERIAL DATA
SERIAL CLOCK
RESET Ⓛ
TAPE EDG Ⓛ
TO OSD
I002
REG 12. 3V
ON SW 5V
Q6003
+B
IC7501 TIMER IC
RESET Ⓛ
POWER FAIL
DAC
DATA OUT
CLK
DATA IN
CS Ⓛ
SERIAL CLOCK
SERIAL DATA
SERIAL DATA
IC7501-38
IC7501-39
IC7501-40
IC7501-41
IC7501-42
IC7501-43
IC7501-44
IC7501-45
IC7501-46
IC7501-47
IC7501-2 STOP
2.8Vp-p (10usec. div)
DP7501
TIMER DISPLAY
GRID 0
GRID 8
SEG 12
SEG 0
GRID SIGNALS
SEGMENT SIGNALS
P50
P51
P52
P53
P54
P56
P60
P61
P62
P43
P42
P41
P40
FF
REW
EJECT
STOP
PLAY
POWER
STILL
REC
PAL/MESECAM
A. DUB
SHIFT/SLEEP
NEXT/SP LP
+/UP
-/DOWN
TIMER REC
CLOCK
PROG
TUNER PRESET
KEY UP
KEY DOWN
KEY RESET
IR
IR7501
IR RECEIVER UNIT
+5V
X0
X1
32KHz (BACK UP)
X7502
TIMER OSC
OSC 1
OSC 2
C7501
X7501
4. 19MHz
+5V
PAL
4. 43 NTSC
3. 58 NTSC
SW6508
3. 58 Ⓗ
4. 43 Ⓗ
P6501
TO AUDIO/VIDEO
OFF
ON
SW6509
SIMUL
TO AUDIO
SW6506
NOISE FILTER
TO VIDEO
MODE SW
P1504
POSITION SW
TAKE UP PHOTO TR
Q1501
SUPPLY PHOTO TR
Q1502
D1501
SENSOR LED
IC1501
T. REEL SNS
IC1502
S. REEL SNS
SW1501
SAFETY TAB SW
MECHANISM CONNECTION
P1503
P1508
LOADING MOTOR
P6001
P1505
T. PHOTO
GND
POSW 2
POSW 1
POSW 3
S. PHOTO
SNS LED
S. REEL
REEL +B
T. REEL
LOADING M (+)
LOADING M (−)
S. TAB Ⓛ
<TIMING CHART>
SW 1
SW 2
SW 3
POSITION NO.
0
7
1
7
3
7
2
7
4
7
5
7
6
MODE
EJECT
CASSETTE DOWN
MID
REV
PLAY STOP3
STOP
FFREW

INPUT		OUTPUT		MODE
PIN5	PIN6	PIN2	PIN10	
L	L	OPEN	OPEN	STOP
H	L	H	L	FORWARD
L	H	L	H	REWIND
H	H	L	L	BRAKE

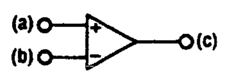
SYMBOL	TRUTH VALUE TABLE

INVERTER



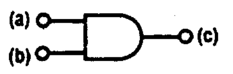
IN	(a)	H	L
OUT	(b)	L	H

COMPARTOR



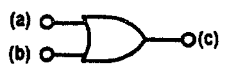
IN	(a) (b)	(a)>(b)	(a)<(b)
OUT	(c)	H	L

AND CIRCUIT



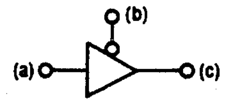
IN	(a)	L	L	H	H
	(b)	L	H	L	H
OUT	(c)	L	L	L	H

OR CIRCUIT



IN	(a)	L	L	H	H
	(b)	L	H	L	H
OUT	(c)	L	H	H	H

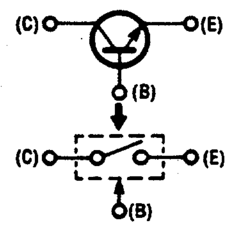
THREE STATES BUFFER



IN	(a)	H	L	H or L
	(b)	L	L	H
OUT	(c)	H	L	※

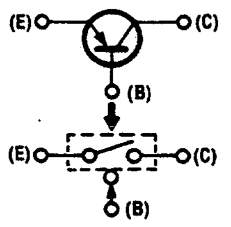
※ High Impedance

TR. SW (NPN TYPE)



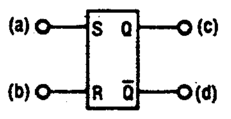
BASE	H	L
TR. SW	ON	OFF

TR. SW (PNP TYPE)



BASE	H	L
TR. SW	OFF	ON

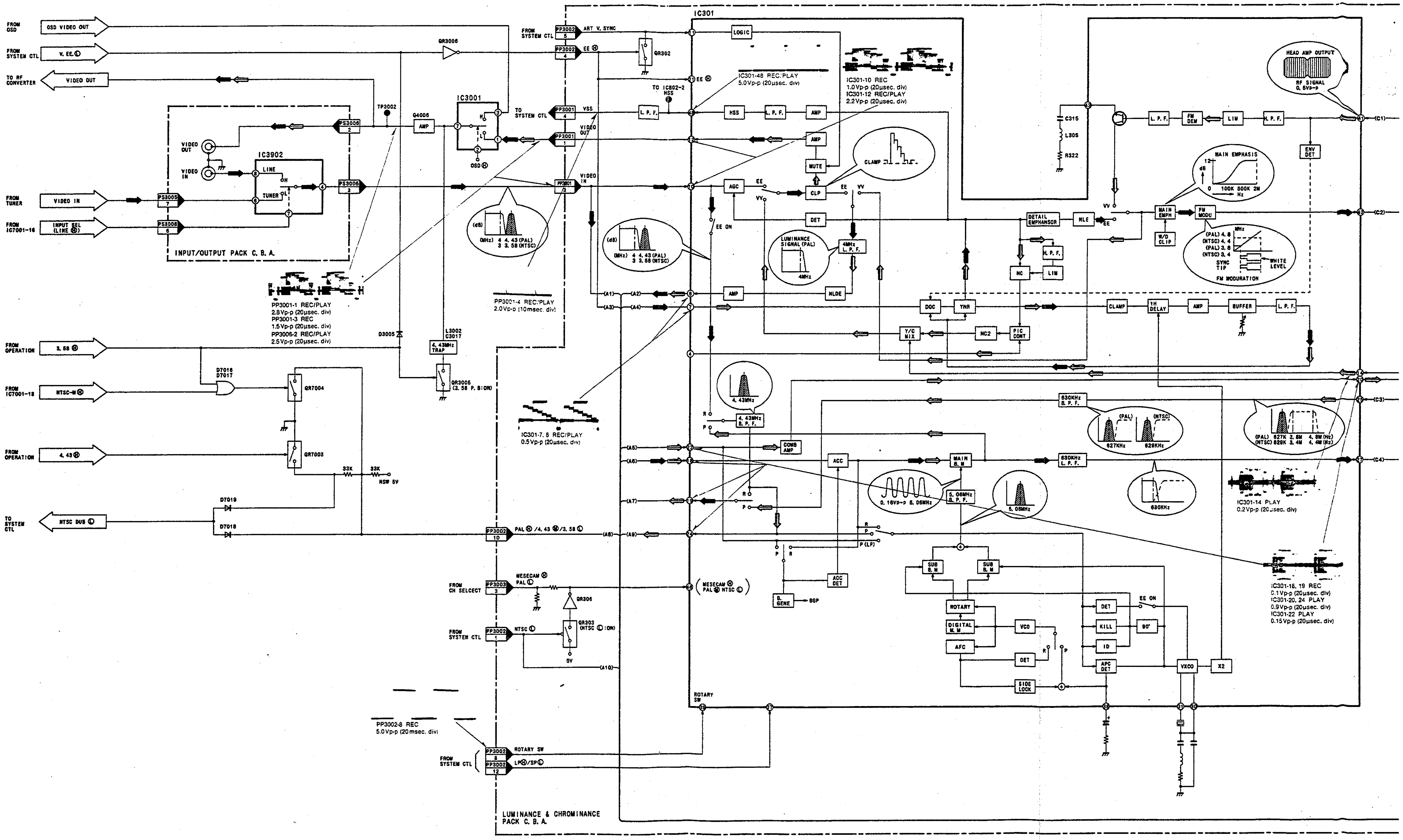
R-S TYPE FLIP-FLOP



IN	(a)	L	L	⎍
	(b)	L	⎍	L
OUT	(c)	※	L	H
	(d)	◆	H	L

※ Initial condition is maintained.
◆ Initial condition is reversed.

3-2. LUMINANCE & CHROMINANCE BLOCK DIAGRAM


FROM OSD
OSD VIDEO OUT
FROM SYSTEM CTL
V. EE Ⓛ
TO RF CONVERTER
VIDEO OUT
FROM TUNER
VIDEO IN
FROM IC7001-16
INPUT SEL (LINE Ⓗ)
VIDEO OUT
VIDEO IN
IC3902
LINE
TUNER
H
L
PS3005 7
PS3006 6
PS3006 2
PS3006 3
INPUT/OUTPUT PACK C. B. A.
TP3002
Q4006
AMP
IC3001
OSD Ⓗ
QR3006
FROM SYSTEM CTL
PP3002 5
ART V. SYNC
PP3002 4
EE Ⓗ
QR302
TO SYSTEM CTL
PP3001 4
VSS
VIDEO OUT
PP3001 1
VIDEO IN
PP3001 3
(dB)
(MHz) 4 4.43 (PAL)
3 3.58 (NTSC)
D3005
L3002 C3017
4.43MHz TRAP
QR3005 (3.58 P. B:ON)
FROM OPERATION
3.58 Ⓗ
FROM IC7001-18
NTSC-M Ⓗ
D7016 D7017
QR7004
FROM OPERATION
4.43 Ⓗ
QR7003
33K
33K
NSW 5V
TO SYSTEM CTL
NTSC DUB Ⓛ
D7019
D7018
PP3002 10
PAL Ⓗ /4.43 Ⓗ/3.58 Ⓛ
FROM CH SELCECT
PP3003 3
MESECAM Ⓗ
PAL Ⓛ
QR306
FROM SYSTEM CTL
PP3002 1
NTSC Ⓛ
QR303 (NTSC Ⓛ:ON)
5V
FROM SYSTEM CTL
PP3002 8
ROTARY SW
PP3002 12
LPⒽ/SPⓁ
LUMINANCE & CHROMINANCE PACK C. B. A.
IC301
LOGIC
TO IC802-2 HSS
L. P. F.
HSS
L. P. F.
AMP
AMP
MUTE
CLAMP
AGC
EE
VV
CLP
EE
VV
DET
EE ON
LUMINANCE SIGNAL (PAL)
4MHz
4MHz L. P. F.
AMP
NLDE
(A1)
(A2)
(A3)
(A4)
(A5)
(A6)
(A7)
(A8)
(A9)
(A10)
DOC
YNR
Y/C MIX
NC2
PIC CONT
NC
LIM
H. P. F.
DETAIL EMPHANSOR
NLE
C315
L305
R322
L. P. F.
FM DEM
LIM
H. P. F.
HEAD AMP OUTPUT
RF SIGNAL 0.5Vp-p
ENV DET
MAIN EMPHASIS
12
dB
0 100K 500K 2M
Hz
MAIN EMPH
W/D CLIP
FM MODU
MHz
(PAL) 4.8
(NTSC) 4.4
(PAL) 3.8
(NTSC) 3.4
SYNC TIP
WHITE LEVEL
FM MODURATION
(C1)
(C2)
(C3)
(C4)
CLAMP
1H DELAY
AMP
BUFFER
L. P. F.
4.43MHz
4.43MHz B. P. F.
R
P
COMB AMP
ACC
MAIN B. M
630KHz B. P. F.
630KHz L. P. F.
(PAL)
(NTSC)
627KHz
629KHz
(PAL) 627K 3.8M 4.8M (Hz)
(NTSC) 629K 3.4M 4.4M (Hz)
630KHz
0.16Vp-p 5.06MHz
5.06MHz B. P. F.
5.06MHz
P (LP)
ACC DET
B. GENE
BGP
(MESECAM Ⓗ PAL Ⓜ NTSC Ⓛ)
SUB B. M
SUB B. M
ROTARY
DIGITAL M. M
AFC
VCO
DET
SIDE LOCK
DET
KILL
ID
APC DET
EE ON
90°
VXCO
X2
ROTARY SW
11
21
43
12
10
8
7
4
22
18
19
24
46
35
37
38
31
30
41
42
14
20
25
27
1
2
3

PP3001-1 REC/PLAY
2.8Vp-p (20µsec. div)
PP3001-3 REC
1.5Vp-p (20µsec. div)
PP3006-2 REC/PLAY
2.5Vp-p (20µsec. div)

PP3001-4 REC/PLAY
2.0Vp-p (10msec. div)

IC301-48 REC/PLAY
5.0Vp-p (20µsec. div)

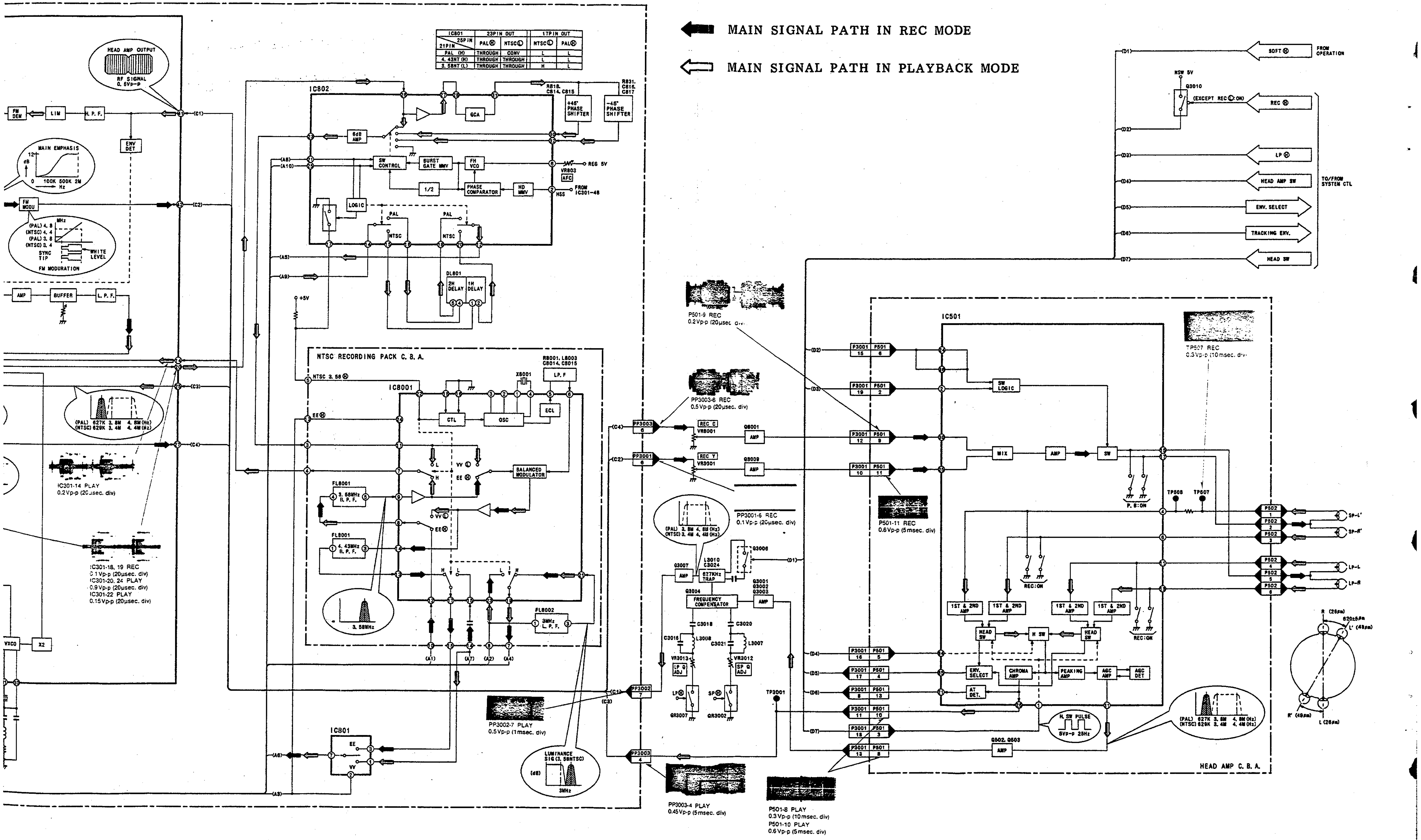
IC301-10 REC
1.0Vp-p (20µsec. div)
IC301-12 REC/PLAY
2.2Vp-p (20µsec. div)

IC301-7, 8 REC/PLAY
0.5Vp-p (20µsec. div)

PP3002-8 REC
5.0Vp-p (20msec. div)

IC301-14 PLAY
0.2Vp-p (20µsec. div)

IC301-18, 19 REC
0.1Vp-p (20µsec. div)
IC301-20, 24 PLAY
0.9Vp-p (20µsec. div)
IC301-22 PLAY
0.15Vp-p (20µsec. div)

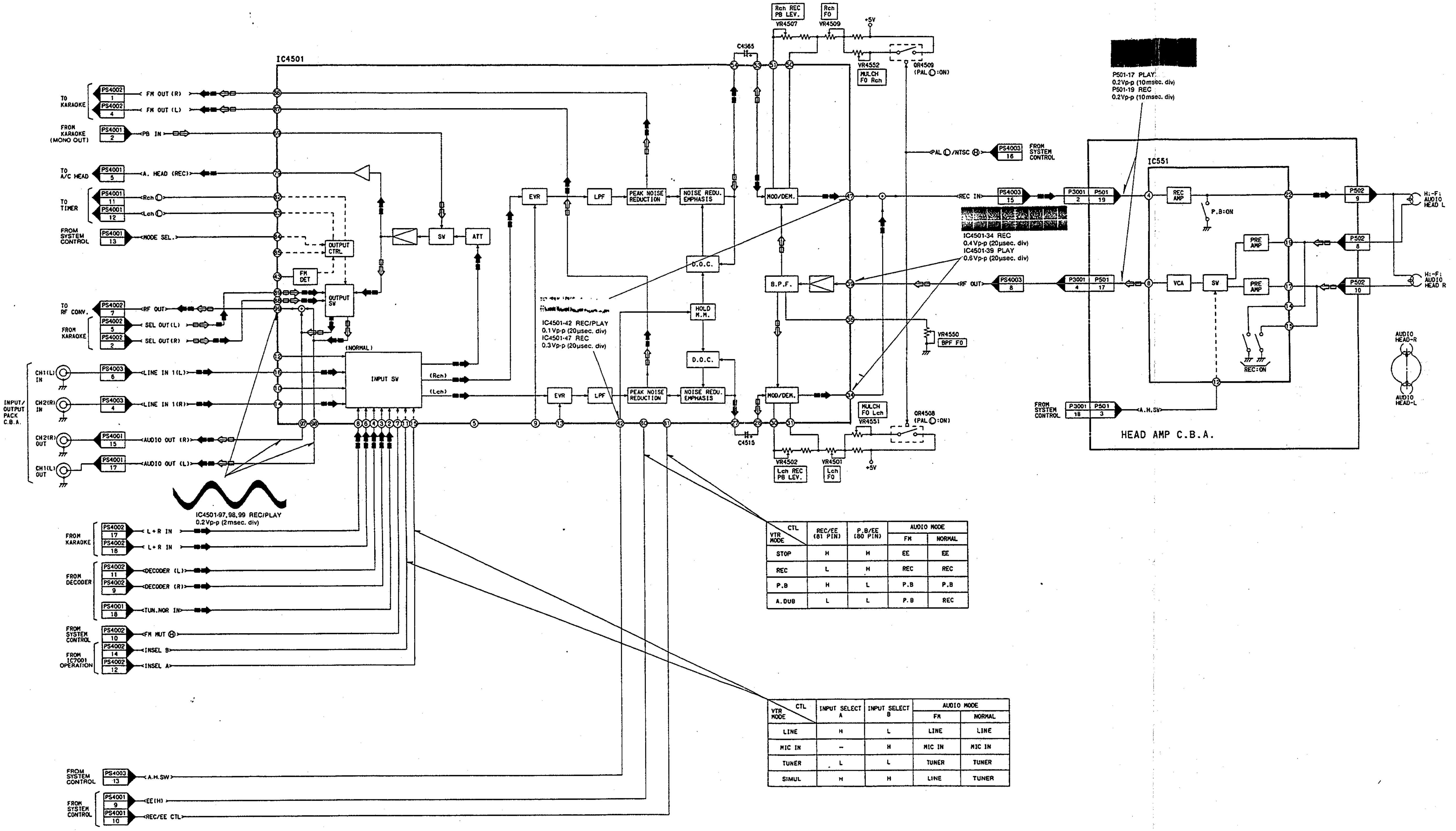

MAIN SIGNAL PATH IN REC MODE
MAIN SIGNAL PATH IN PLAYBACK MODE
HEAD AMP OUTPUT
RF SIGNAL 0. 5Vp-p
FM DEM
LIM
H. P. F.
ENV DET
MAIN EMPHASIS
12
dB
0
100K 500K 2M
Hz
FM MODU
MHz
(PAL) 4. 8
(NTSC) 4. 4
(PAL) 3. 8
(NTSC) 3. 4
SYNC TIP
WHITE LEVEL
FM MODURATION
AMP
BUFFER
L. P. F.
(C1)
(C2)
(C3)
(C4)
(PAL) 627K 3. 8M 4. 8M (Hz)
(NTSC) 629K 3. 4M 4. 4M (Hz)
IC301-14 PLAY
0.2Vp-p (20μsec. div)
IC301-18, 19 REC
0.1Vp-p (20μsec. div)
IC301-20, 24 PLAY
0.9Vp-p (20μsec. div)
IC301-22 PLAY
0.15Vp-p (20μsec. div)
VXCO
X2
IC802
6dB AMP
GCA
R818, C814, C815
R831, C816, C817
+45° PHASE SHIFTER
-45° PHASE SHIFTER
SW CONTROL
BURST GATE MMV
FH VCO
1/2
PHASE COMPARATOR
HD MMV
REG 5V
VR803
AFC
FROM IC301-48
HSS
LOGIC
PAL
NTSC
(A8)
(A10)
(A5)
(A9)
DL801
2H DELAY
1H DELAY
+5V
NTSC RECORDING PACK C. B. A.
NTSC 3. 58 Ⓗ
EE Ⓗ
IC8001
R8001, L8003
C8014, C8015
LP. F
X8001
CTL
OSC
ECL
VV Ⓛ
BALANCED MODULATOR
FL8001
3. 58MHz B. P. F.
4. 43MHz B. P. F.
3. 58MHz
FL8002
3MHz L. P. F.
(A1)
(A7)
(A2)
(A4)
(A6)
(A3)
IC801
EE
VV
PP3002-7 PLAY
0.5Vp-p (1msec. div)
LUMINANCE SIG (3. 58NTSC)
(dB)
3MHz
P501-9 REC
0.2Vp-p (20μsec. div)
PP3003-6 REC
0.5Vp-p (20μsec. div)
PP3003
PP3001
PP3002
REC C
VR8001
REC Y
VR3001
Q8001
Q3009
AMP
PP3001-6 REC
0.1Vp-p (20μsec. div)
(PAL) 3. 8M 4. 8M (Hz)
(NTSC) 3. 4M 4. 4M (Hz)
Q3006
Q3007
L3010
C3024
627KHz TRAP
Q3004
FREQUENCY COMPENSATOR
Q3001
Q3002
Q3003
C3018
C3020
C3016
L3008
C3021
L3007
VR3013
VR3012
LP Q ADJ
SP Q ADJ
LP Ⓗ
SP Ⓗ
QR3007
QR3002
TP3001
(D1)
(D2)
(D3)
(D4)
(D5)
(D6)
(D7)
PP3003-4 PLAY
0.45Vp-p (5msec. div)
P501-8 PLAY
0.3Vp-p (10msec. div)
P501-10 PLAY
0.6Vp-p (5msec. div)
SOFT Ⓗ
FROM OPERATION
NSW 5V
Q3010
(EXCEPT REC Ⓛ:ON)
REC Ⓗ
LP Ⓗ
HEAD AMP SW
ENV. SELECT
TRACKING ENV.
HEAD SW
TO/FROM SYSTEM CTL
IC501
P3001
P501
SW LOGIC
MIX
SW
TP507 REC
0.3Vp-p (10msec. div)
P501-11 REC
0.6Vp-p (5msec. div)
P. B:ON
TP508
TP507
REC:ON
1ST & 2ND AMP
HEAD SW
H SW
ENV. SELECT
CHROMA AMP
PEAKING AMP
AGC AMP
AGC DET
AT DET.
H. SW PULSE
5Vp-p 25Hz
Q502, Q503
P502
SP-L'
SP-R'
LP-L
LP-R
R (26μm)
620±5μm
L' (49μm)
R' (49μm)
L (26μm)
HEAD AMP C. B. A.

IC801 25PIN / 21PIN	23PIN OUT PAL Ⓗ	23PIN OUT NTSC Ⓛ	17PIN OUT NTSC Ⓛ	17PIN OUT PAL Ⓗ
PAL (H)	THROUGH	CONV	L	L
4. 43NT (H)	THROUGH	THROUGH	L	L
3. 58NT (L)	THROUGH	THROUGH	H	L

3-3. Hi-Fi AUDIO BLOCK DIAGRAM

◀■ MAIN SIGNAL PATH IN REC MODE

◁□ MAIN SIGNAL PATH IN PLAYBACK MODE

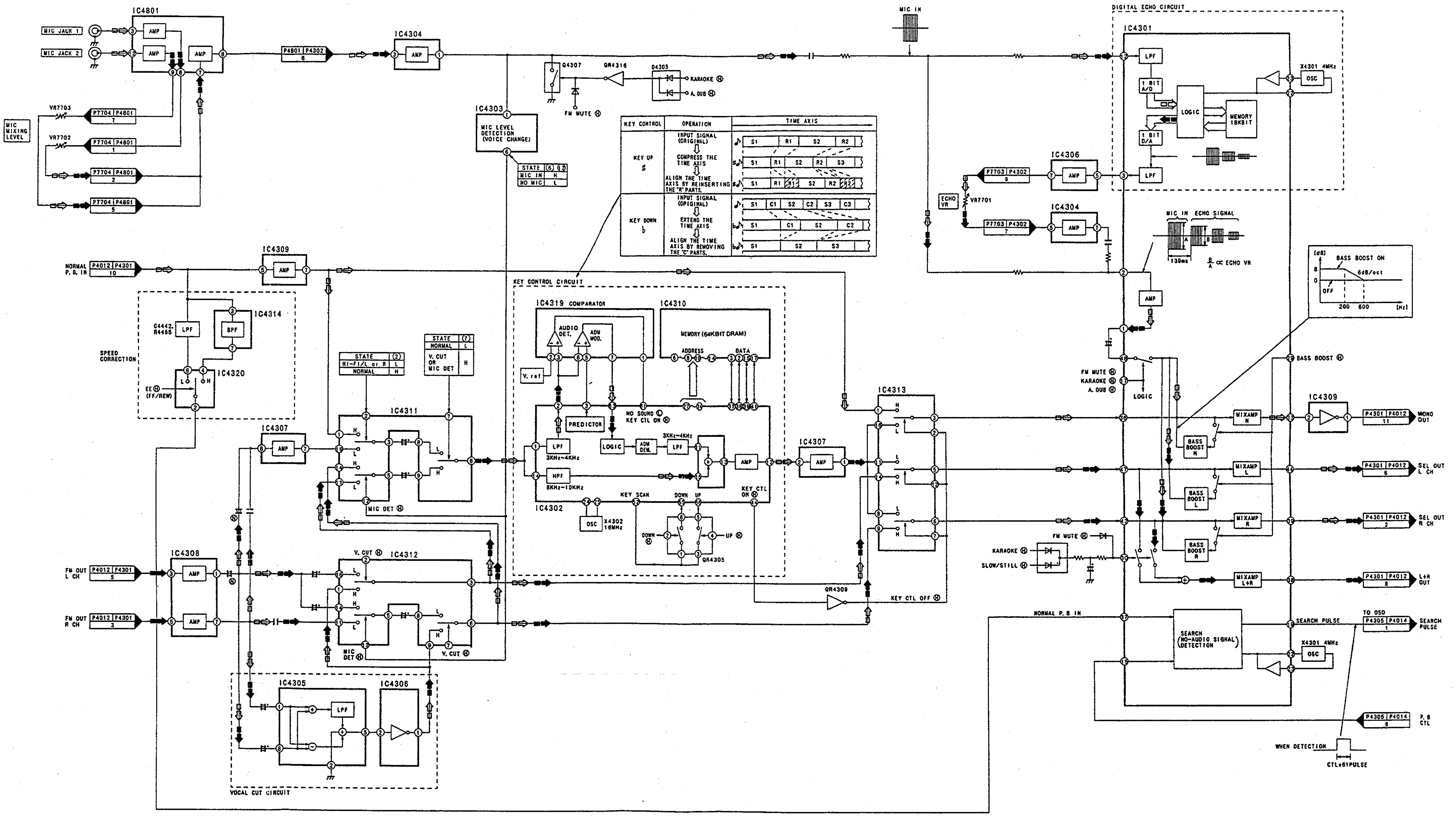

IC4501
TO KARAOKE
PS4002 1
FM OUT (R)
PS4002 4
FM OUT (L)
FROM KARAOKE (MONO OUT)
PS4001 2
PB IN
TO A/C HEAD
PS4001 5
A. HEAD (REC)
TO TIMER
PS4001 11
Rch Ⓛ
PS4001 12
Lch Ⓛ
FROM SYSTEM CONTROL
PS4001 13
MODE SEL.
OUTPUT CTRL
FM DET
OUTPUT SW
TO RF CONV.
PS4002 7
RF OUT
FROM KARAOKE
PS4002 5
SEL OUT (L)
PS4002 2
SEL OUT (R)
(NORMAL)
INPUT SW
(Rch)
(Lch)
INPUT/OUTPUT PACK C.B.A.
CH1(L) IN
PS4003 6
LINE IN 1(L)
CH2(R) IN
PS4003 4
LINE IN 1(R)
CH2(R) OUT
PS4001 15
AUDIO OUT (R)
CH1(L) OUT
PS4001 17
AUDIO OUT (L)
IC4501-97, 98, 99 REC/PLAY
0.2Vp-p (2msec. div)
FROM KARAOKE
PS4002 17
L+R IN
PS4002 18
L+R IN
FROM DECODER
PS4002 11
DECODER (L)
PS4002 9
DECODER (R)
PS4001 18
TUN.NOR IN
FROM SYSTEM CONTROL
PS4002 10
FM MUT Ⓗ
FROM IC7001 OPERATION
PS4002 14
INSEL B
PS4002 12
INSEL A
FROM SYSTEM CONTROL
PS4003 13
A.M.SW
FROM SYSTEM CONTROL
PS4001 9
EE(H)
PS4001 10
REC/EE CTL
SW
ATT
EVR
LPF
PEAK NOISE REDUCTION
NOISE REDU. EMPHASIS
D.O.C.
HOLD M.M.
IC4501-42 REC/PLAY
0.1Vp-p (20μsec. div)
IC4501-47 REC
0.3Vp-p (20μsec. div)
C4565
C4515
Rch REC PB LEV.
VR4507
Rch FO
VR4509
+5V
VR4552
MULCH FO Rch
QR4509
(PAL Ⓛ:ON)
MOD/DEM.
B.P.F.
PAL Ⓛ/NTSC Ⓗ
PS4003 16
FROM SYSTEM CONTROL
REC IN
PS4003 15
IC4501-34 REC
0.4Vp-p (20μsec. div)
IC4501-39 PLAY
0.6Vp-p (20μsec. div)
RF OUT
PS4003 8
VR4550
BPF FO
MULCH FO Lch
VR4551
QR4508
(PAL Ⓛ:ON)
VR4502
Lch REC PB LEV.
VR4501
Lch FO
+5V
P501-17 PLAY
0.2Vp-p (10msec. div)
P501-19 REC
0.2Vp-p (10msec. div)
IC551
P3001 2
P501 19
P3001 4
P501 17
REC AMP
P.B:ON
PRE AMP
VCA
SV
PRE AMP
REC:ON
P502 9
P502 8
P502 10
Hi-Fi AUDIO HEAD L
Hi-Fi AUDIO HEAD R
AUDIO HEAD-R
AUDIO HEAD-L
FROM SYSTEM CONTROL
P3001 18
P501 3
A.H.SW
HEAD AMP C.B.A.

VTR MODE \ CTL	REC/EE (81 PIN)	P.B/EE (80 PIN)	AUDIO MODE	
			FM	NORMAL
STOP	H	H	EE	EE
REC	L	H	REC	REC
P.B	H	L	P.B	P.B
A.DUB	L	L	P.B	REC

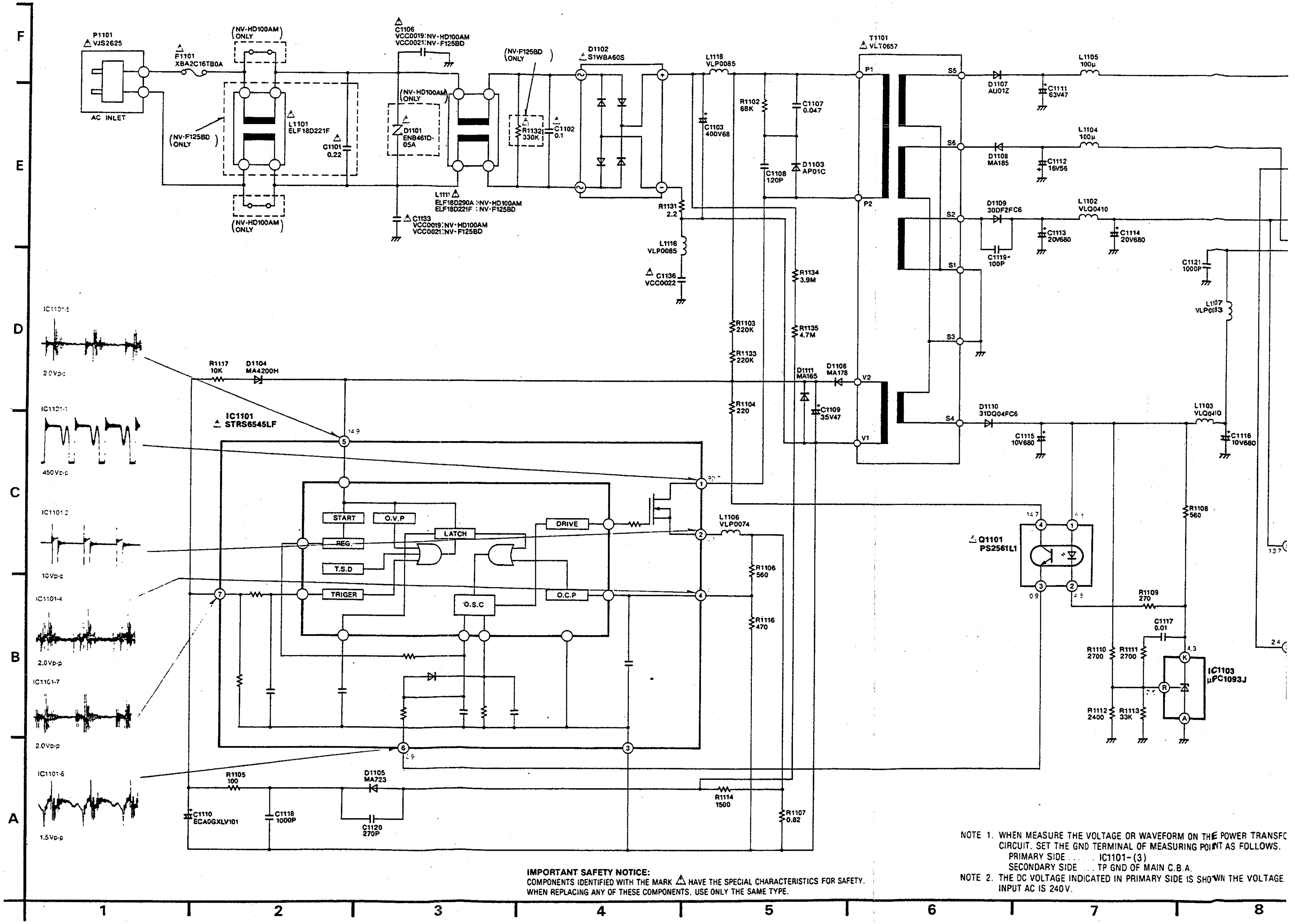
VTR MODE \ CTL	INPUT SELECT A	INPUT SELECT B	AUDIO MODE	
			FM	NORMAL
LINE	H	L	LINE	LINE
MIC IN	–	H	MIC IN	MIC IN
TUNER	L	L	TUNER	TUNER
SIMUL	H	H	LINE	TUNER

3-4. KARAOKE BLOCK DIAGRAM

◀■ MAIN SIGNAL PATH IN REC MODE ⇦□ MAIN SIGNAL PATH IN PLAYBACK MODE


IC4801
MIC JACK 1
MIC JACK 2
AMP
VR7703
VR7702
MIC MIXING LEVEL
P7704 P4801 7
P7704 P4801 1
P7704 P4801 2
P7704 P4801 5
P4801 P4302 6
IC4304
IC4303
MIC LEVEL DETECTION (VOICE CHANGE)
STATE ⑥ ⑫
MIC IN H
NO MIC L
Q4307
QR4316
D4305
KARAOKE Ⓗ
A. DUB Ⓗ
FM MUTE Ⓗ
KEY CONTROL
OPERATION
TIME AXIS
KEY UP ♯
INPUT SIGNAL (ORIGINAL)
COMPRESS THE TIME AXIS
ALIGN THE TIME AXIS BY REINSERTING THE "R" PARTS.
S1 R1 S2 R2
S1 R1 S2 R2 S3
S1 R1 R1 S2 R2 R2
KEY DOWN ♭
INPUT SIGNAL (ORIGINAL)
EXTEND THE TIME AXIS
ALIGN THE TIME AXIS BY REMOVING THE "C" PARTS.
S1 C1 S2 C2 S3 C3
S1 C1 S2 C2
S1 S2 S3
MIC IN
DIGITAL ECHO CIRCUIT
IC4301
LPF
1 BIT A/D
LOGIC
MEMORY 18KBIT
1 BIT D/A
X4301 4MHz
OSC
IC4306
IC4304
P7703 P4302 9
P7703 P4302 7
ECHO VR
VR7701
MIC IN ECHO SIGNAL
A
B
139ms
B/A ∝ ECHO VR
[dB]
BASS BOOST ON
6dB/oct
8
0
OFF
200
600
[Hz]
NORMAL P. B. IN
P4012 P4301 10
IC4309
IC4314
C4442, R4455
LPF
BPF
SPEED CORRECTION
IC4320
EE Ⓗ (FF/REW)
STATE ②
Hi-Fi/L or R L
NORMAL H
STATE ⑦
NORMAL L
V. CUT OR MIC DET H
IC4311
IC4307
MIC DET Ⓗ
KEY CONTROL CIRCUIT
IC4319 COMPARATOR
AUDIO DET.
ADM MOD.
V. ref
IC4310
MEMORY (64KBIT DRAM)
ADDRESS
DATA
PREDICTOR
NO SOUND Ⓛ
KEY CTL ON Ⓗ
3KHz~4KHz
8KHz~10KHz
HPF
ADM DEM.
KEY SCAN
DOWN
UP
KEY CTL ON Ⓗ
IC4302
OSC
X4302 16MHz
DOWN Ⓗ
UP Ⓗ
QR4305
QR4309
KEY CTL OFF Ⓗ
IC4313
IC4307
FM OUT L CH
P4012 P4301 5
FM OUT R CH
P4012 P4301 3
IC4308
IC4312
V. CUT Ⓗ
MIC DET Ⓗ
V. CUT Ⓗ
IC4305
IC4306
VOCAL CUT CIRCUIT
FM MUTE Ⓗ
KARAOKE Ⓗ
A. DUB Ⓗ
LOGIC
BASS BOOST Ⓗ
MIXAMP N
MIXAMP L
MIXAMP R
MIXAMP L+R
BASS BOOST N
BASS BOOST L
BASS BOOST R
P4301 P4012 11
MONO OUT
P4301 P4012 6
SEL OUT L CH
P4301 P4012 2
SEL OUT R CH
P4301 P4012 8
L+R OUT
FM MUTE Ⓗ
KARAOKE Ⓗ
SLOW/STILL Ⓗ
NORMAL P. B IN
SEARCH (NO-AUDIO SIGNAL DETECTION)
SEARCH PULSE
TO OSD
P4305 P4014 1
SEARCH PULSE
X4301 4MHz
OSC
P4305 P4014 6
P. B CTL
WHEN DETECTION
CTL×61PULSE

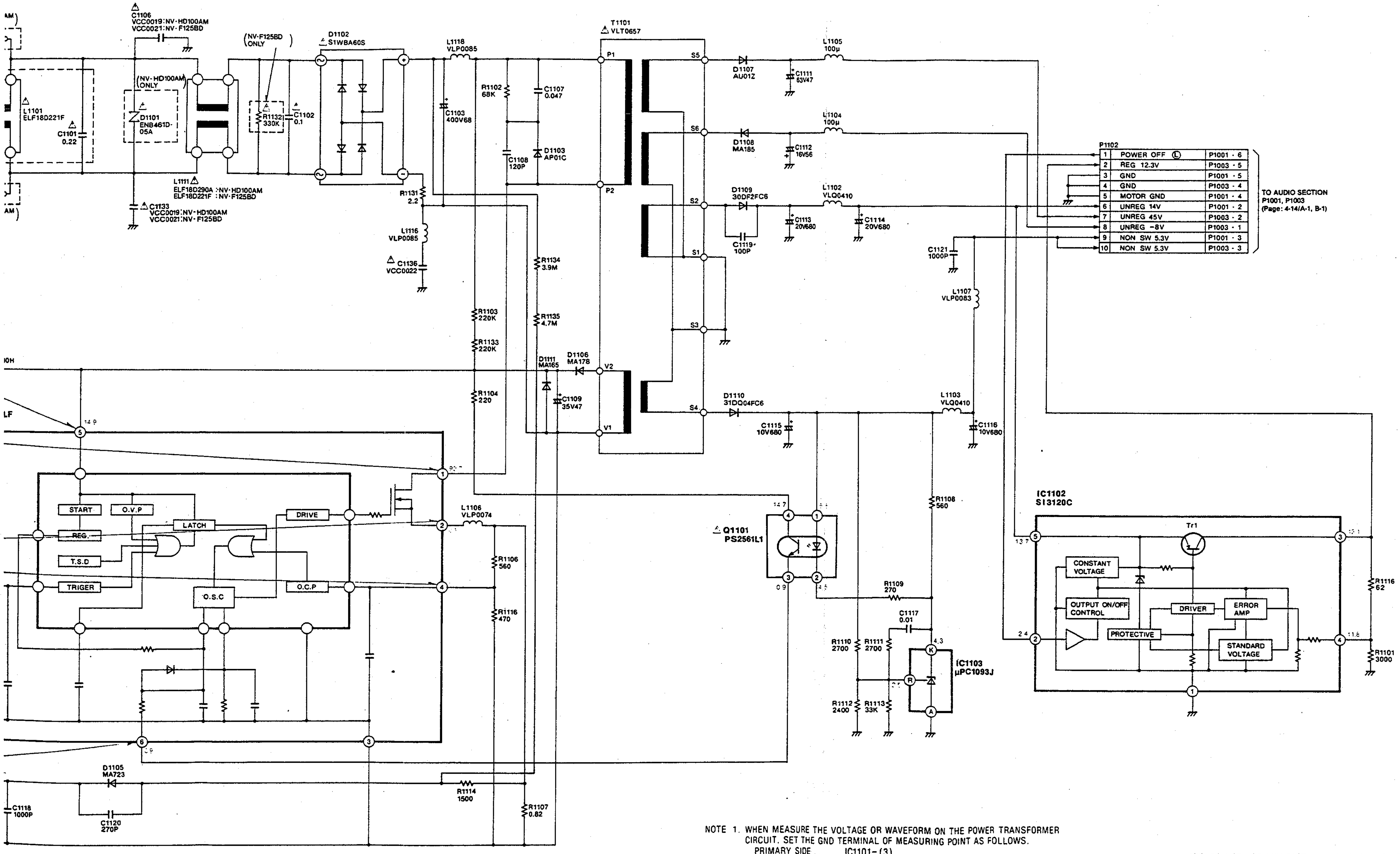
SECTION 4
SCHEMATIC DIAGRAMS
4-1. POWER SCHEMATIC DIAGRAM


F
E
D
C
B
A
1
2
3
4
5
6
7
8
P1101
⚠ VJS2625
AC INLET
⚠ F1101
XBA2C16TB0A
(NV-HD100AM ONLY)
(NV-F125BD ONLY)
⚠ L1101
ELF18D221F
⚠ C1101
0.22
⚠ C1106
VCC0019:NV-HD100AM
VCC0021:NV-F125BD
(NV-HD100AM ONLY)
⚠ D1101
ENB461D-05A
L1111 ⚠
ELF18D290A :NV-HD100AM
ELF18D221F :NV-F125BD
⚠ C1133
VCC0019:NV-HD100AM
VCC0021:NV-F125BD
(NV-F125BD ONLY)
⚠ R1132
330K
⚠ C1102
0.1
D1102
⚠ S1WBA60S
L1118
VLP0085
C1103
400V68
R1102
68K
C1107
0.047
C1108
120P
D1103
AP01C
R1131
2.2
L1116
VLP0085
⚠ C1136
VCC0022
R1134
3.9M
R1103
220K
R1135
4.7M
R1133
220K
R1104
220
D1111
MA165
D1106
MA178
C1109
35V47
T1101
⚠ VLT0657
P1
P2
V2
V1
S5
S6
S2
S1
S3
S4
D1107
AU01Z
C1111
63V47
L1105
100μ
D1108
MA185
C1112
16V56
L1104
100μ
D1109
30DF2FC6
C1119
100P
C1113
20V680
L1102
VLQ0410
C1114
20V680
C1121
1000P
L1107
VLP0083
D1110
31DQ04FC6
C1115
10V680
L1103
VLQ0410
C1116
10V680
R1117
10K
D1104
MA4200H
⚠ IC1101
STRS6545LF
START
O.V.P
REG.
LATCH
T.S.D
TRIGER
DRIVE
O.S.C
O.C.P
L1106
VLP0074
R1106
560
R1116
470
⚠ Q1101
PS2561L1
R1108
560
R1109
270
C1117
0.01
R1110
2700
R1111
2700
R1112
2400
R1113
33K
IC1103
μPC1093J
K
R
A
R1105
100
D1105
MA723
C1110
ECA0GXLV101
C1118
1000P
C1120
270P
R1114
1500
R1107
0.82
IC1101-5
2.0Vp-p
IC1101-1
450Vp-p
IC1101-2
10Vp-p
IC1101-4
2.0Vp-p
IC1101-7
2.0Vp-p
IC1101-6
1.5Vp-p

IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED WITH THE MARK ⚠ HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY.
WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SAME TYPE.

NOTE 1. WHEN MEASURE THE VOLTAGE OR WAVEFORM ON THE POWER TRANSF
CIRCUIT, SET THE GND TERMINAL OF MEASURING POINT AS FOLLOWS.
PRIMARY SIDE ...... IC1101-(3)
SECONDARY SIDE ... TP GND OF MAIN C.B.A.
NOTE 2. THE DC VOLTAGE INDICATED IN PRIMARY SIDE IS SHOWN THE VOLTAGE
INPUT AC IS 240V.

DIAGRAM


AM)
AM)
C1106
VCC0019:NV-HD100AM
VCC0021:NV-F125BD
L1101
ELF18D221F
C1101
0.22
(NV-HD100AM ONLY)
D1101
ENB461D-05A
L1111
ELF18D290A :NV-HD100AM
ELF18D221F :NV-F125BD
C1133
VCC0019:NV-HD100AM
VCC0021:NV-F125BD
(NV-F125BD ONLY)
R1132
330K
C1102
0.1
D1102
S1WBA60S
R1131
2.2
L1116
VLP0085
C1136
VCC0022
L1118
VLP0085
C1103
400V68
R1102
68K
C1107
0.047
C1108
120P
D1103
AP01C
R1134
3.9M
R1135
4.7M
R1103
220K
R1133
220K
R1104
220
D1111
MA165
D1106
MA178
C1109
35V47
T1101
VLT0657
P1
P2
V2
V1
S5
S6
S2
S1
S3
S4
D1107
AU01Z
C1111
63V47
L1105
100µ
D1108
MA185
C1112
16V56
L1104
100µ
D1109
30DF2FC6
C1119
100P
C1113
20V680
L1102
VLQ0410
C1114
20V680
C1121
1000P
L1107
VLP0083
D1110
31DQ04FC6
C1115
10V680
L1103
VLQ0410
C1116
10V680
P1102
1 POWER OFF Ⓛ P1001 - 6
2 REG 12.3V P1003 - 5
3 GND P1001 - 5
4 GND P1003 - 4
5 MOTOR GND P1001 - 4
6 UNREG 14V P1001 - 2
7 UNREG 45V P1003 - 2
8 UNREG -8V P1003 - 1
9 NON SW 5.3V P1001 - 3
10 NON SW 5.3V P1003 - 3
TO AUDIO SECTION
P1001, P1003
(Page: 4-14/A-1, B-1)
IOH
LF
START
O.V.P
REG.
LATCH
T.S.D
TRIGER
DRIVE
O.S.C
O.C.P
L1106
VLP0074
R1106
560
R1116
470
D1105
MA723
C1118
1000P
C1120
270P
R1114
1500
R1107
0.82
Q1101
PS2561L1
14.7
0.9
4.5
R1108
560
R1109
270
C1117
0.01
R1110
2700
R1111
2700
R1112
2400
R1113
33K
4.3
IC1103
µPC1093J
K
R
A
IC1102
SI3120C
Tr1
CONSTANT VOLTAGE
OUTPUT ON/OFF CONTROL
PROTECTIVE
DRIVER
ERROR AMP
STANDARD VOLTAGE
13.7
2.4
11.8
R1116
62
R1101
3000

NOTE 1. WHEN MEASURE THE VOLTAGE OR WAVEFORM ON THE POWER TRANSFORMER CIRCUIT. SET THE GND TERMINAL OF MEASURING POINT AS FOLLOWS.
PRIMARY SIDE . . . . . IC1101-(3)
SECONDARY SIDE . . . TP GND OF MAIN C.B.A.

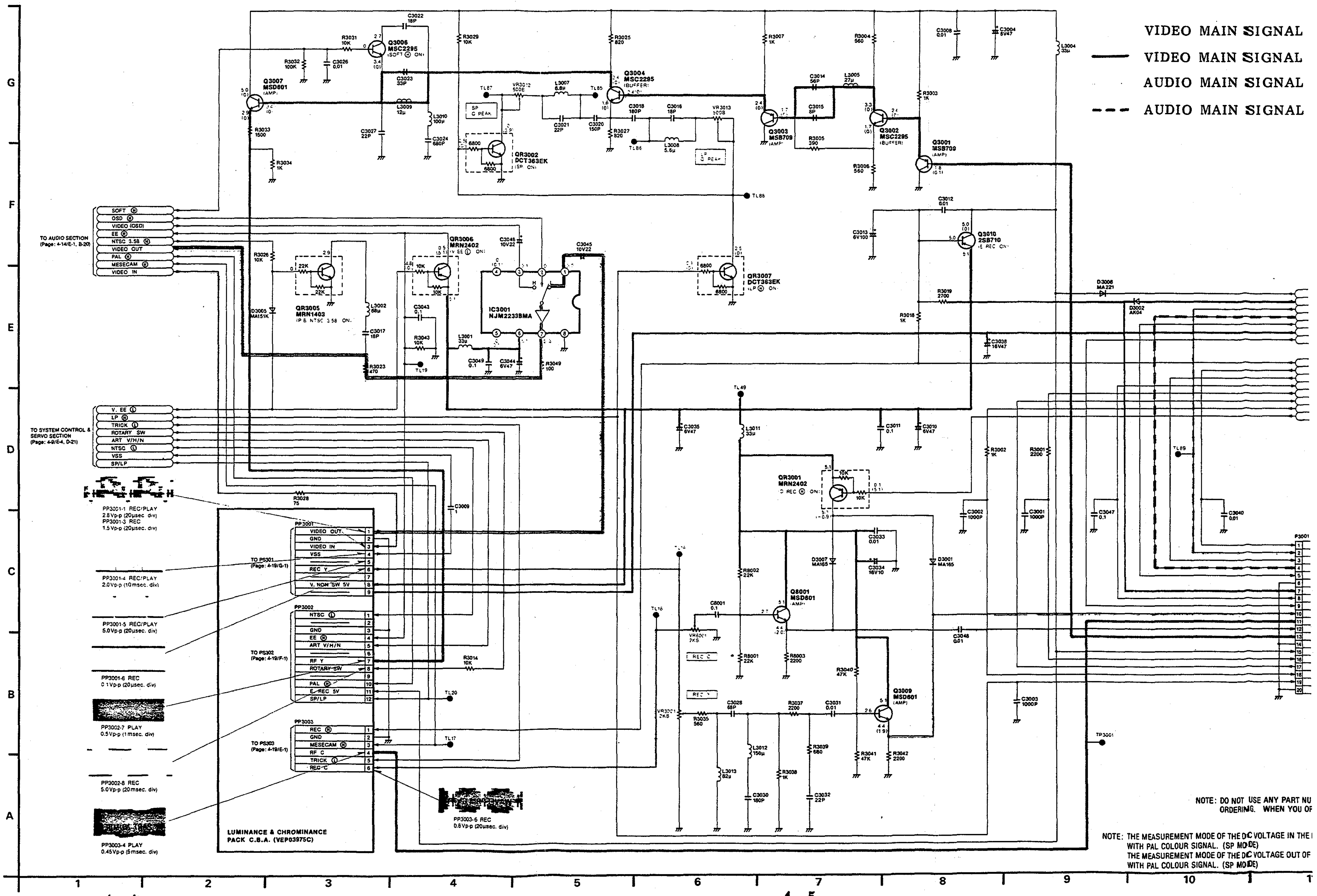
NOTE 2. THE DC VOLTAGE INDICATED IN PRIMARY SIDE IS SHOWN THE VOLTAGE WHEN INPUT AC IS 240V.

NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED WITH THE MARK ⚠ HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY. WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SAME TYPE.

2 3 4 5 6 7 8 9 10

4-2. LUMINANCE & CHROMINANCE SECTION IN MAIN SCHEMATIC DIAGRAM


VIDEO MAIN SIGNAL
VIDEO MAIN SIGNAL
AUDIO MAIN SIGNAL
AUDIO MAIN SIGNAL
G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10
TO AUDIO SECTION (Page: 4-14/E-1, B-20)
SOFT Ⓗ
OSD Ⓗ
VIDEO (OSD)
EE Ⓗ
NTSC 3.58 Ⓗ
VIDEO OUT
PAL Ⓗ
MESECAM Ⓗ
VIDEO IN
TO SYSTEM CONTROL & SERVO SECTION (Page: 4-9/E-4, D-21)
V. EE Ⓛ
LP Ⓗ
TRICK Ⓛ
ROTARY SW
ART V/H/N
NTSC Ⓛ
VSS
SP/LP
PP3001-1 REC/PLAY 2.8Vp-p (20µsec. div)
PP3001-3 REC 1.5Vp-p (20µsec. div)
PP3001-4 REC/PLAY 2.0Vp-p (10msec. div)
PP3001-5 REC/PLAY 5.0Vp-p (20µsec. div)
PP3001-6 REC 0.1Vp-p (20µsec. div)
PP3002-7 PLAY 0.5Vp-p (1msec. div)
PP3002-8 REC 5.0Vp-p (20msec. div)
PP3003-4 PLAY 0.45Vp-p (5msec. div)
PP3003-6 REC 0.6Vp-p (20µsec. div)
TO PS301 (Page: 4-19/G-1)
TO PS302 (Page: 4-19/F-1)
TO PS303 (Page: 4-19/E-1)
PP3001
VIDEO OUT
GND
VIDEO IN
VSS
REC Y
V. NON SW 5V
PP3002
NTSC Ⓛ
GND
EE Ⓗ
ART V/H/N
RF Y
ROTARY SW
PAL Ⓗ
E. REC 5V
SP/LP
PP3003
REC Ⓗ
GND
MESECAM Ⓗ
RF C
TRICK Ⓛ
REC C
LUMINANCE & CHROMINANCE PACK C.B.A. (VEP03975C)
Q3007 MSD601 (AMP)
Q3006 MSC2295 (SOFT Ⓗ ON)
Q3004 MSC2295 (BUFFER)
Q3003 MSB709 (AMP)
Q3002 MSC2295 (BUFFER)
Q3001 MSB709 (AMP)
Q3010 2SB710 (E REC ON)
QR3002 DCT363EK (SP ON)
QR3007 DCT363EK (LP Ⓗ ON)
QR3005 MRN1403 (P & NTSC 3.58 ON)
QR3006 MRN2402 (V. EE Ⓛ ON)
QR3001 MRN2402 (REC Ⓗ ON)
IC3001 NJM2233BMA
Q8001 MSD601 (AMP)
Q3009 MSD601 (AMP)
D3005 MA151K
D3006 MA221
D3002 AK04
D3007 MA165
D3001 MA165
SP C PEAK
LP PEAK
REC C
REC Y
TL49
TL85
TL86
TL87
TL89
TL16
TL17
TL19
TL20
TP3001
P3001

NOTE: DO NOT USE ANY PART NU
ORDERING. WHEN YOU OF

NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE
WITH PAL COLOUR SIGNAL. (SP MODE)
THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF
WITH PAL COLOUR SIGNAL. (SP MODE)

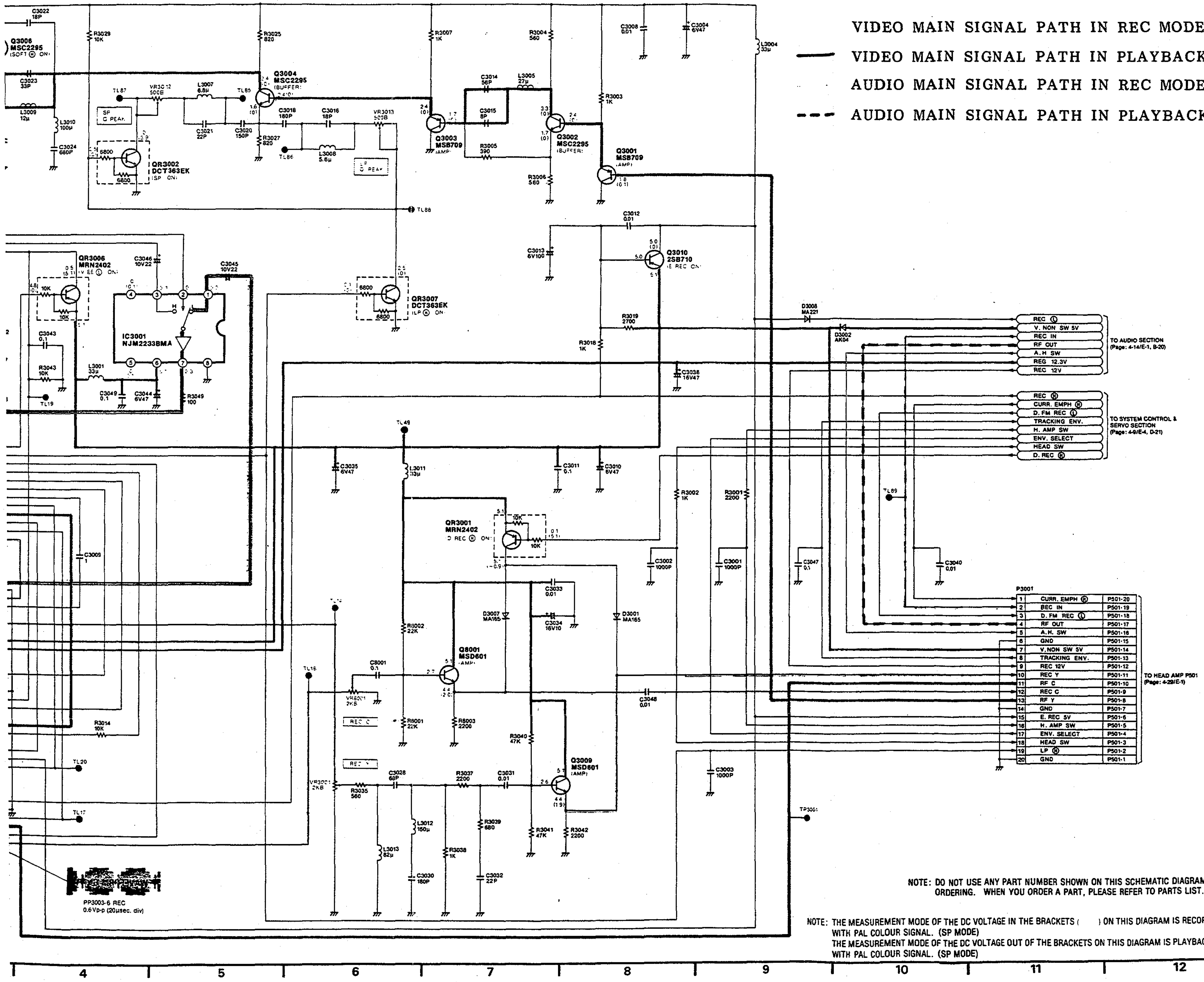
CTION IN MAIN SCHEMATIC DIAGRAM

VIDEO MAIN SIGNAL PATH IN REC MODE

━━ VIDEO MAIN SIGNAL PATH IN PLAYBACK MODE

····· AUDIO MAIN SIGNAL PATH IN REC MODE

- - - AUDIO MAIN SIGNAL PATH IN PLAYBACK MODE



C3022 18P
Q3006 MSC2295 (SOFT Ⓗ ON)
C3023 33P
L3009 12μ
L3010 100μ
C3024 680P
R3029 10K
TL87
VR3012 500B
L3007 6.8μ
TL85
SP C PEAK
6800
6800
QR3002 DCT363EK (SP ON)
C3021 22P
C3020 150P
R3025 820
Q3004 MSC2295 (BUFFER)
R3027 820
TL86
C3018 180P
C3016 18P
L3008 5.6μ
VR3013 500B
LP C PEAK
TL88
R3007 1K
Q3003 MSB709 (AMP)
C3014 56P
L3005 27μ
C3015 8P
R3005 390
R3004 560
Q3002 MSC2295 (BUFFER)
R3006 560
R3003 1K
Q3001 MSB709 (AMP)
C3008 0.01
C3004 6V47
L3004 33μ
C3012 0.01
C3013 6V100
Q3010 2SB710 (E REC ON)
R3019 2700
R3018 1K
C3036 16V47
D3008 MA221
D3002 AK04
QR3006 MRN2402 (V EE Ⓛ ON)
10K
10K
C3046 10V22
C3045 10V22
IC3001 NJM2233BMA
H
L
C3043 0.1
R3043 10K
TL19
L3001 33μ
C3049 0.1
C3044 6V47
R3049 100
6800
6800
QR3007 DCT363EK (LP Ⓗ ON)
TL49
C3035 6V47
L3011 33μ
C3011 0.1
C3010 6V47
R3002 1K
R3001 2200
TL89
QR3001 MRN2402 (D REC Ⓗ ON)
10K
10K
C3002 1000P
C3001 1000P
C3047 0.1
C3040 0.01
C3009 1
C3033 0.01
C3034 16V10
D3007 MA165
D3001 MA165
R8002 22K
Q8001 MSD601 (AMP)
C8001 0.1
VR8001 2KB
TL16
REC C
R8001 22K
R8003 2200
C3048 0.01
R3040 47K
R3014 10K
TL20
TL17
REC Y
VR3001 2KB
R3035 560
C3028 68P
R3037 2200
C3031 0.01
Q3009 MSD601 (AMP)
C3003 1000P
TP3001
L3012 150μ
L3013 82μ
R3038 1K
R3039 680
C3030 180P
C3032 22P
R3041 47K
R3042 2200
PP3003-6 REC
0.6Vp-p (20μsec. div)
REC Ⓛ
V. NON SW 5V
REC IN
RF OUT
A.H SW
REG 12.3V
REC 12V
TO AUDIO SECTION
(Page: 4-14/E-1, B-20)
REC Ⓗ
CURR. EMPH Ⓗ
D. FM REC Ⓛ
TRACKING ENV.
H. AMP SW
ENV. SELECT
HEAD SW
D. REC Ⓗ
TO SYSTEM CONTROL & SERVO SECTION
(Page: 4-9/E-4, D-21)
P3001
1 CURR. EMPH Ⓗ P501-20
2 REC IN P501-19
3 D. FM REC Ⓛ P501-18
4 RF OUT P501-17
5 A.H. SW P501-16
6 GND P501-15
7 V.NON SW 5V P501-14
8 TRACKING ENV. P501-13
9 REC 12V P501-12
10 REC Y P501-11
11 RF C P501-10
12 REC C P501-9
13 RF Y P501-8
14 GND P501-7
15 E. REC 5V P501-6
16 H. AMP SW P501-5
17 ENV. SELECT P501-4
18 HEAD SW P501-3
19 LP Ⓗ P501-2
20 GND P501-1
TO HEAD AMP P501
(Page: 4-29/E-1)
4
5
6
7
8
9
10
11
12

NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS ( ) ON THIS DIAGRAM IS RECORD MODE WITH PAL COLOUR SIGNAL. (SP MODE)
THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE WITH PAL COLOUR SIGNAL. (SP MODE)

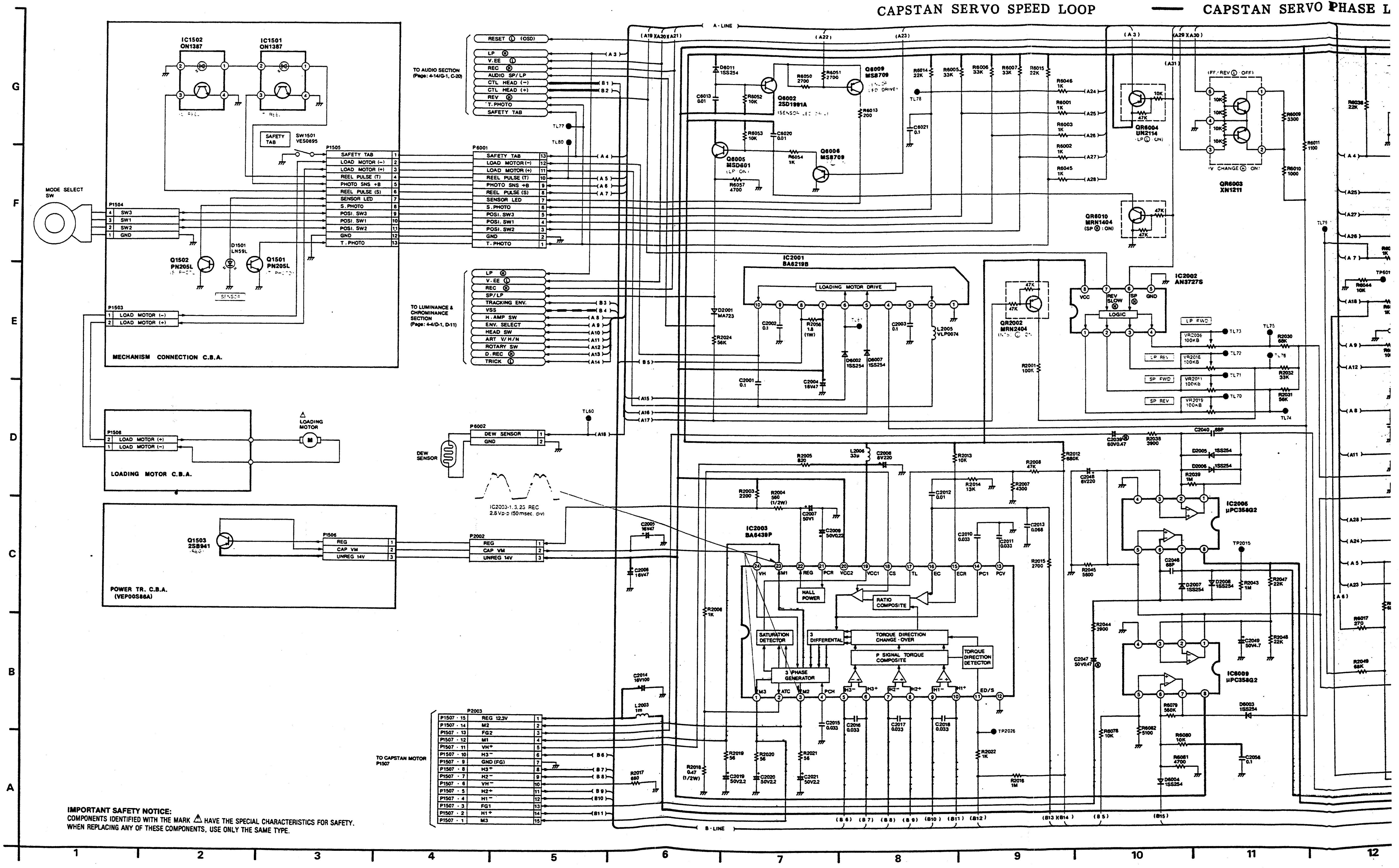
SYSTEM CONTROL & SERVO ICs VOLTAGE CHART (SP MODE)

REF. NO.	IC2001										IC2002									
MODE	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	8		
STOP	0	0.7	0	7.1	0	0	14.6	14.6	0.1	0.7	3.6	2.6	0	0	0	5.1	5.1	5.1		
PLAY	0	0.7	0.1	7.0	0	0	14.5	14.5	0	0.7	2.7	5.1	0	0	0	5.1	0	5.1		
REC	0	0.7	0	7.0	0	0	14.4	14.4	0.1	0.7	0	5.1	0	0	0	5.1	0	5.1		
F.F	0	0.8	0.1	14.3	0	0.1	14.4	14.3	0.1	0.7	2.7	5.1	0	0	0	5.1	0	0		
REW	0	0.8	0.1	14.5	0	0	14.5	14.5	0.1	0.7	5.1	0	0	0	0	5.1	5.1	5.1		
REF. NO.	IC2003																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP	1.1	0	1.1	1.5	2.3	2.3	2.3	2.3	2.3	2.3	2.1	0	2.7	0.5	2.9	0.5	0.4	0	5.1	14.6
PLAY	–	0	–	1.4	2.3	2.3	2.3	2.3	2.3	2.3	0	0	0.7	0.7	2.9	2.6	0.4	0.1	5.1	14.5
REC	–	0	–	1.5	2.3	2.3	2.3	2.3	2.3	2.3	0	0	0.7	0.7	2.9	2.6	0.4	0.1	5.1	14.5
F.F	5.2	0.2	7.3	1.5	2.3	2.3	2.3	2.3	2.3	2.3	0	0	0.8	0.8	2.9	2.3	0.5	0.2	5.1	14.4
REW	6.8	0.1	7.5	1.5	2.3	2.3	2.3	2.3	2.3	2.3	5.1	0	0.8	0.7	2.9	2.4	0.5	0.1	5.1	14.5
REF. NO.	IC2003																			
MODE	21	22	23	24																
STOP	0.5	14.0	1.0	4.5																
PLAY	2.4	13.0	–	4.7																
REC	2.4	13.0	–	4.7																
F.F	12.3	3.6	6.1	14.7																
REW	12.2	5.1	7.9	14.3																
REF. NO.	IC2005																			
MODE	1	2	3	4	5	6	7	8												
STOP	2.6	2.6	2.6	0	2.6	2.6	2.6	5.1												
PLAY	2.6	2.6	2.6	0	2.6	2.6	2.6	5.1												
REC	2.6	2.6	2.6	0	2.6	2.6	2.6	5.1												
F.F	2.6	2.6	2.6	0	2.6	2.6	2.6	5.1												
REW	2.6	2.6	2.6	0	2.6	2.6	2.6	5.1												
REF. NO.	IC2901																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18		
STOP	14.4	14.6	0.1	1.1	0	2.6	2.5	2.6	2.6	2.7	5.1	3.7	3.8	3.7	1.5	14.6	14.4	0.1		
PLAY	14.4	14.6	0.1	1.0	0	2.6	2.6	2.6	2.8	5.1	3.8	3.8	3.8	1.5	1.2	14.5	14.2	0.2		
REC	14.4	14.6	0.1	1.0	0	2.6	2.6	2.6	2.7	5.1	3.8	3.8	3.8	3.8	1.5	14.2	14.6	0.1		
F.F	14.4	14.6	0.1	1.0	0	2.6	2.6	2.6	2.5	2.7	5.1	3.8	3.8	3.8	1.5	14.2	14.6	0.1		
REW	14.4	14.6	0	1.0	0	2.6	2.6	2.6	2.5	2.7	5.1	3.8	3.8	3.8	1.5	14.2	14.6	0.1		
REF. NO.	IC6001																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP	0	5.1	0	0	0.1	5.1	0.1	0	2.5	3.8	0	0	0	0	0	2.6	5.1	5.1	0.1	0
PLAY	0	5.1	0	0	4.9	5.1	0	0	0	0	5.1	0	0	0	0	2.6	4.9	5.1	0	0
REC	0	5.1	0	0	4.9	5.1	0.1	0	4.6	0	0	0	0	0	0	2.6	4.9	5.1	–	0
F.F	0	5.1	5.1	0	3.0	0	0.1	0	2.7	0	0	0	0	0	0	2.6	4.9	5.1	0	0
REW	0	5.1	0	0	0	5.1	0	0	2.8	5.1	5.1	0	0	0	0	0	0	5.1	0	0
REF. NO.	IC6001																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
STOP	0	5.1	0.5	2.5	2.2	2.5	0	2.5	0	2.6	2.4	0	5.1	0	0	0	0	2.6	0	2.5
PLAY	0	5.1	2.6	2.5	3.9	2.5	2.5	0	0	2.6	2.7	2.5	5.0	0	0	0	2.6	2.6	0	2.8
REC	5.1	5.1	2.6	2.5	0.3	0	2.5	2.5	0	2.6	2.4	2.7	5.0	0	0	0	2.6	2.5	0	2.4
F.F	5.1	5.1	2.3	2.5	2.7	2.5	2.5	2.5	0	2.6	2.5	2.7	5.0	0	0	0	2.6	2.6	0	2.9
REW	5.1	0	2.6	2.5	3.4	2.5	2.5	2.5	0	2.6	2.5	2.7	5.0	0	0	0	2.6	2.6	0	0
REF. NO.	IC6001																			
MODE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
STOP	2.5	5.1	1.2	3.7	0	4.0	0	5.1	0	0	1.4	1.4	5.1	5.1	5.1	5.1	0	0	0	4.9
PLAY	2.6	5.1	0	0	0	4.2	0	0	0	0	1.4	0	0	0.1	5.1	0	0	0	0	0
REC	2.6	5.1	1.4	3.0	0	4.0	0	0	0	0	1.0	0	5.1	0	0	5.1	0	0	0	0
F.F	2.5	5.1	1.1	3.6	0	4.0	0	5.1	0	0	1.4	1.4	5.1	0.1	0	5.1	0	0	0	4.1
REW	2.5	5.1	1.1	3.6	0	4.3	0	5.1	0	0	1.3	0	5.1	0.1	0	5.1	0	0	0	5.1
REF. NO.	IC6001																			
MODE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
STOP	5.1	2.1	4.6	4.2	0	0	0	0	0.3	5.1	0	5.1	5.1	0	0.1	5.0	0	0	5.1	0
PLAY	5.1	0	4.6	4.5	0	0.1	0	0	0.3	5.1	0	0	0	0	0	5.0	0	4.8	0	0
REC	0	0	4.5	0	5.1	0	0	5.1	5.0	5.1	0	0	5.1	0	0.1	0	0	0	0	0
F.F	0	0	4.5	4.6	0	0	0	0	0.3	5.1	0	0	5.1	0	0.1	0	0	0	5.1	0
REW	5.1	5.1	4.6	4.6	0	0	0	0	0.3	5.1	0	5.1	5.1	0	0.1	0	0	0	5.1	0
REF. NO.	IC6001																			
MODE	81	82	83	84																
STOP	0	2.7	2.1	4.8																
PLAY	0	2.6	2.6	4.8																
REC	0	2.6	0	4.8																
F.F	0	2.6	2.6	4.8																
REW	0	2.6	2.6	4.8																
REF. NO.	IC6009																			
MODE	1	2	3	4	5	6	7	8												
STOP	2.6	2.6	2.6	0	4.9	0.7	13.4	14.6												
PLAY	2.6	2.6	2.6	0	4.9	0	13.3	14.5												
REC	2.6	2.6	2.6	0	4.9	0.7	13.3	14.5												
F.F	2.6	2.6	2.6	0	4.9	0	13.9	14.4												
REW	2.6	2.6	2.6	0	4.9	0.7	13.9	14.5												

SYSTEM CONTROL & SERVO TRANSISTORs DC VOLTAGE CHART (SP MODE)

REF. NO.	Q1503			Q2001			Q6001			Q6002			Q6003			Q6004		
MODE	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B
STOP	14.7	4.5	14.1	5.1	4.8	5.1	5.0	5.1	5.6	5.2	14.6	5.7	5.2	−1.3	5.1	5.1	10.4	5.7
PLAY	14.3	4.7	13.8	5.1	4.8	5.1	5.0	5.1	5.6	5.0	14.5	5.7	5.0	5.0	4.3	5.1	10.2	5.7
REC	14.4	4.7	13.8	5.1	4.8	5.1	5.0	5.1	5.6	5.0	14.4	5.7	5.0	5.0	4.3	5.1	10.2	5.7
F.F	14.4	14.4	13.7	5.1	4.8	5.1	5.0	5.1	5.7	5.1	14.5	5.7	5.1	5.0	4.3	5.1	10.2	5.7
REW	14.4	14.4	13.7	5.1	4.9	5.1	5.0	5.1	5.7	5.0	14.5	5.7	5.1	5.0	4.3	5.1	10.0	5.7
REF. NO.	Q6005			Q6006														
MODE	E	C	B	E	C	B												
STOP	0.3	5.1	0	0	0	0												
PLAY	0.3	5.1	0	0	0	0												
REC	0.3	5.1	0	0	0	0												
F.F	0.3	5.1	0	0	0	0												
REW	0.3	5.1	0	0	0	0												
REF. NO.	QR2001						QR2002			QR6002			QR6003					
MODE	1	2	3	4	5		E	C	B	E	C	B	1	2	3	4	5	
STOP	0	0	5.0	0	5.0		5.1	0	5.1	0	1.4	4.4	0	0	5.1	0	5.0	
PLAY	0	0	5.0	0	0		5.1	0	5.1	0	1.0	3.8	0	0.1	5.1	0	5.0	
REC	0	0	5.0	0	5.0		5.1	0	5.1	0	1.2	4.0	0	0	5.1	0	5.0	
F.F	0	0.9	0	0	0		5.1	0	5.1	0	1.4	4.1	14.4	14.4	0	0	0	
REW	0	0.8	0	0	0		5.1	0	5.1	0	1.4	4.1	14.4	14.4	0	0	0	
REF. NO.	QR6004			QR6005			QR6010			QR6011								
MODE	E	C	B	E	C	B	E	C	B	E	C	B						
STOP	5.1	0.1	5.1	0	1.5	4.2	0	0	5.1	0	4.9	0						
PLAY	5.1	0.1	5.1	0	1.5	4.1	0	0	5.1	0	4.9	0						
REC	5.1	0	5.1	0	1.3	4.1	0	0	0.1	0	0	5.1						
F.F	5.1	0.1	5.1	0	1.4	4.2	0	0	5.1	0	4.9	0						
REW	5.1	0.1	5.1	0	1.3	4.0	0	0	5.1	0	4.9	0						

4-3. SYSTEM CONTROL & SERVO SECTION IN MAIN SCHEMATIC DIAGRAM


CAPSTAN SERVO SPEED LOOP
CAPSTAN SERVO PHASE L
A - LINE
B - LINE
IC1502 ON1387
IC1501 ON1387
SAFETY TAB
SW1501 VES0695
MODE SELECT SW
P1504
SW3
SW1
SW2
GND
P1505
SAFETY TAB
LOAD MOTOR (−)
LOAD MOTOR (+)
REEL PULSE (T)
PHOTO SNS +B
REEL PULSE (S)
SENSOR LED
S. PHOTO
POSI. SW3
POSI. SW1
POSI. SW2
GND
T. PHOTO
Q1502 PN205L
D1501 LN59L
Q1501 PN205L
SENSOR
P1503
LOAD MOTOR (−)
LOAD MOTOR (+)
MECHANISM CONNECTION C.B.A.
P1508
LOAD MOTOR (+)
LOAD MOTOR (−)
LOADING MOTOR
LOADING MOTOR C.B.A.
Q1503 2SB941
P1506
REG
CAP VM
UNREG 14V
POWER TR. C.B.A. (VEP00S86A)
TO AUDIO SECTION (Page: 4-14/G-1, C-20)
RESET Ⓛ (OSD)
LP Ⓗ
V.EE Ⓛ
REC Ⓗ
AUDIO SP/LP
CTL HEAD (−)
CTL HEAD (+)
REV Ⓗ
T. PHOTO
SAFETY TAB
TL77
TL80
P6001
TO LUMINANCE & CHROMINANCE SECTION (Page: 4-4/D-1, D-11)
SP/LP
TRACKING ENV.
VSS
H. AMP SW
ENV. SELECT
HEAD SW
ART V/H/N
ROTARY SW
D. REC Ⓗ
TRICK Ⓛ
TL60
P6002
DEW SENSOR
GND
IC2003-1, 3, 23 REC 2.5 Vp-p (50msec. div)
P2002
TO CAPSTAN MOTOR P1507
P2003
REG 12.3V
M2
FG2
M1
VH+
H3−
GND (FG)
H3+
H2−
VH−
H2+
H1−
FG1
H1+
M3
D6011 1SS254
C6013 0.01
R6052 10K
Q6002 2SD1991A
R6050 2700
R6051 2700
Q6009 MSB709
R6013 200
R6053 10K
C6020 0.01
Q6005 MSD601
R6057 4700
R6054 1K
Q6006 MSB709
R6014 22K
R6005 33K
R6006 33K
R6007 33K
R6015 22K
TL78
C6021 0.1
R6046 1K
R6001 1K
R6003 1K
R6002 1K
R6045 1K
QR6004 UN2114
QR6003 XN1211
QR6010 MRN1404 (SP Ⓗ : ON)
R6009 3300
R6011 1100
R6010 1000
R6038 22K
IC2001 BA6219B
LOADING MOTOR DRIVE
D2001 MA723
R2024 56K
C2002 0.1
R2056 1.8 (1W)
C2003 0.1
L2005 VLP0074
D6002 1SS254
D6007 1SS254
C2001 0.1
C2004 16V47
QR2002 MRN2404
R2001 100K
IC2002 AN3727S
VCC
REV SLOW Ⓗ
SP Ⓗ
GND
LOGIC
LP FWD
LP REV
SP FWD
SP REV
VR2006 100KB
VR2016 100KB
VR2011 100KB
VR2019 100KB
TL73
TL72
TL71
TL70
TL75
TL76
TL74
R2030 68K
R2032 33K
R2031 56K
IC2003 BA6439P
R2005 820
L2006 33μ
C2008 6V220
R2013 10K
R2012 680K
R2008 47K
R2003 2200
R2004 560 (1/2W)
C2007 50V1
C2009 50V0.22
C2012 0.01
R2014 13K
R2007 4300
C2010 0.033
C2011 0.033
C2013 0.068
C2005 16V47
C2006 16V47
VH
M1
REG
PCR
VCC2
VCC1
CS
TL
EC
ECR
PC1
PCV
HALL POWER
RATIO COMPOSITE
SATURATION DETECTOR
3 DIFFERENTIAL
TORQUE DIRECTION CHANGE - OVER
P SIGNAL TORQUE COMPOSITE
TORQUE DIRECTION DETECTOR
3 PHASE GENERATOR
M3
ATC
M2
PCH
H3−
H3+
H2−
H2+
H1−
H1+
ED/S
R2006 1K
C2014 16V100
L2003 1m
R2017 680
R2018 0.47 (1/2W)
R2019 56
R2020 56
R2021 56
C2019 50V2.2
C2020 50V2.2
C2021 50V2.2
C2015 0.033
C2016 0.033
C2017 0.033
C2018 0.033
TP2026
R2022 1K
R2016 1M
R2015 2700
C2039 50V0.47
R2038 3900
C2040 68P
D2005 1SS254
D2006 1SS254
R2039 1M
C2045 6V220
IC2005 μPC358G2
TP2015
C2046 68P
R2045 5600
D2007 1SS254
D2008 1SS254
R2043 1M
R2047 22K
R2044 3900
C2047 50V0.47
C2049 50V4.7
R2048 22K
IC6009 μPC358G2
R6017 270
R2049 68K
R6079 560K
D6003 1SS254
R6078 10K
R6082 5100
R6080 10K
R6081 4700
D6004 1SS254
C2056 0.1
TP601
R6044 10K
G
F
E
D
C
B
A
1
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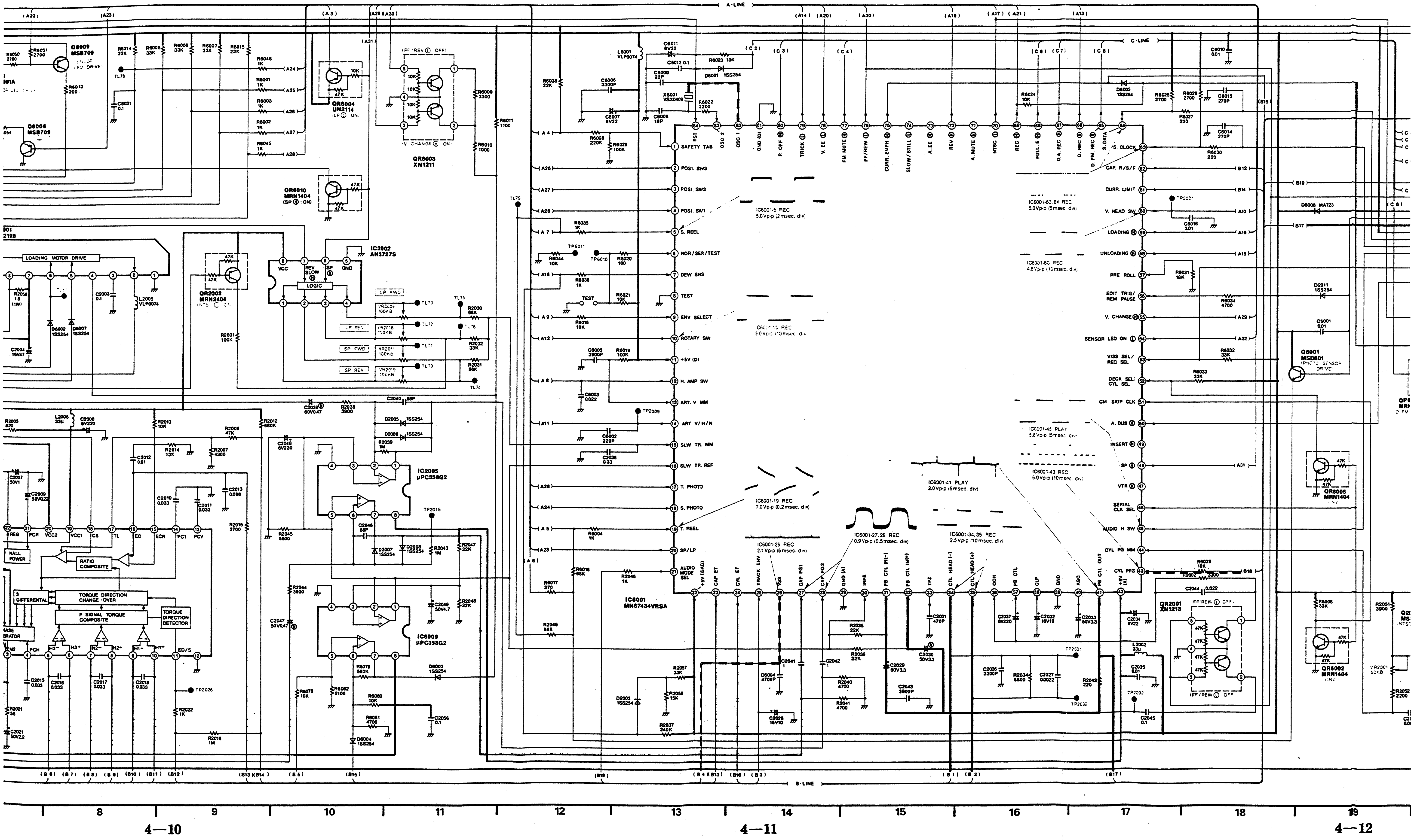
12

IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED WITH THE MARK ⚠ HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY.
WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SAME TYPE.

CAPSTAN SERVO SPEED LOOP ——— CAPSTAN SERVO PHASE LOOP CYLINDER SERVO SPEED LOOP - - - CYLINDER SERVO PHASE LOOP



A-LINE
B-LINE
C-LINE
IC6001
MN67434VRSA
SAFETY TAB
POSI. SW3
POSI. SW2
POSI. SW1
S. REEL
NOR/SER/TEST
DEW SNS
TEST
ENV SELECT
ROTARY SW
+5V (D)
H. AMP SW
ART. V MM
ART V/H/N
SLW TR. MM
SLW TR. REF
T. PHOTO
S. PHOTO
T. REEL
SP/LP
AUDIO MODE SEL
+5V (DAC)
CAP ET
CYL ET
TRACK ENV
CAP FG1
CAP FG2
GND (A)
IRFE
PB CTL IN(−)
PB CTL IN(+)
TP2
CTL HEAD (−)
CTL HEAD (+)
OCH
PB CTL
CLP
GND
AGC
PB CTL OUT
+5V (A)
CYL PFG
CYL PG MM
AUDIO H SW
SERIAL CLK SEL
VTR
SP
INSERT
A. DUB
CM SKIP CLK
DECK SEL/CYL SEL
VISS SEL/REC SEL
SENSOR LED ON
V. CHANGE
EDIT TRIG/REM PAUSE
PRE ROLL
UNLOADING
LOADING
V. HEAD SW
CURR. LIMIT
CAP. R/S/F
/S. CLOCK
S. DATA
D. FM. REC
D. REC
D.A. REC
FULL. E
REC
NTSC
A. MUTE
REV
A. EE
SLOW/STILL
CURR. EMPH
FF/REW
FM MUTE
GND (D)
V. EE
TRICK
P. OFF
OSC 1
OSC 2
RST
IC6001-5 REC 5.0Vp-p (2msec. div)
IC6001-10 REC 5.0Vp-p (10msec. div)
IC6001-19 REC 7.0Vp-p (0.2msec. div)
IC6001-26 REC 2.1Vp-p (5msec. div)
IC6001-27, 28 REC 0.9Vp-p (0.5msec. div)
IC6001-41 PLAY 2.0Vp-p (5msec. div)
IC6001-34, 35 REC 2.5Vp-p (10msec. div)
IC6001-43 REC 5.0Vp-p (10msec. div)
IC6001-45 PLAY 5.8Vp-p (5msec. div)
IC6001-60 REC 4.8Vp-p (10msec. div)
IC6001-63, 64 REC 5.0Vp-p (5msec. div)
IC2002 AN3727S
VCC
REV SLOW
SP
GND
LOGIC
IC2005 μPC358G2
IC6009 μPC358G2
QR6003 XN1211
QR6004 UN2114
QR6010 MRN1404
QR2002 MRN2404
QR2001 XN1213
QR6005 MRN1404
QR6002 MRN1404
Q6001 MSD601 (PHOTO SENSOR DRIVE)
Q6009 MSB709
Q6006 MSB709
X6001 VSX0409
L6001 VLP0074
L2005 VLP0074
LOADING MOTOR DRIVE
HALL POWER
RATIO COMPOSITE
TORQUE DIRECTION CHANGE-OVER
P SIGNAL TORQUE COMPOSITE
TORQUE DIRECTION DETECTOR
DIFFERENTIAL
VCC2
VCC1
PCR
CS
TL
EC
ECR
PC1
PCV
ED/S
PCH
LP FWD
LP REV
SP FWD
SP REV
TL70
TL71
TL72
TL73
TL74
TL75
TL76
TL78
TL79
TP2009
TP2015
TP2026
TP2031
TP2032
TP6010
TP6011
8
9
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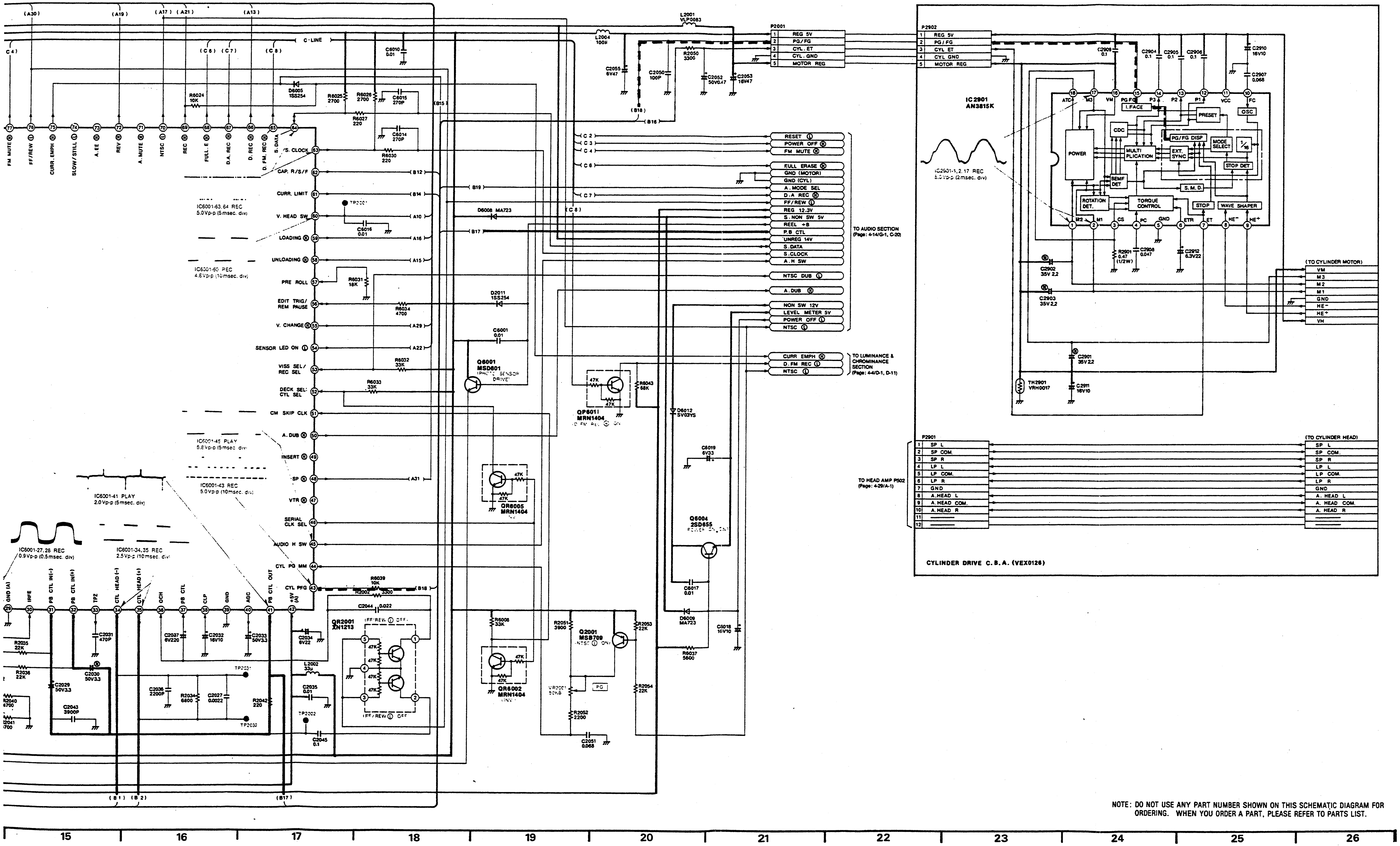
18
19
4—10
4—11
4—12

SPEED LOOP ——— CYLINDER SERVO PHASE LOOP

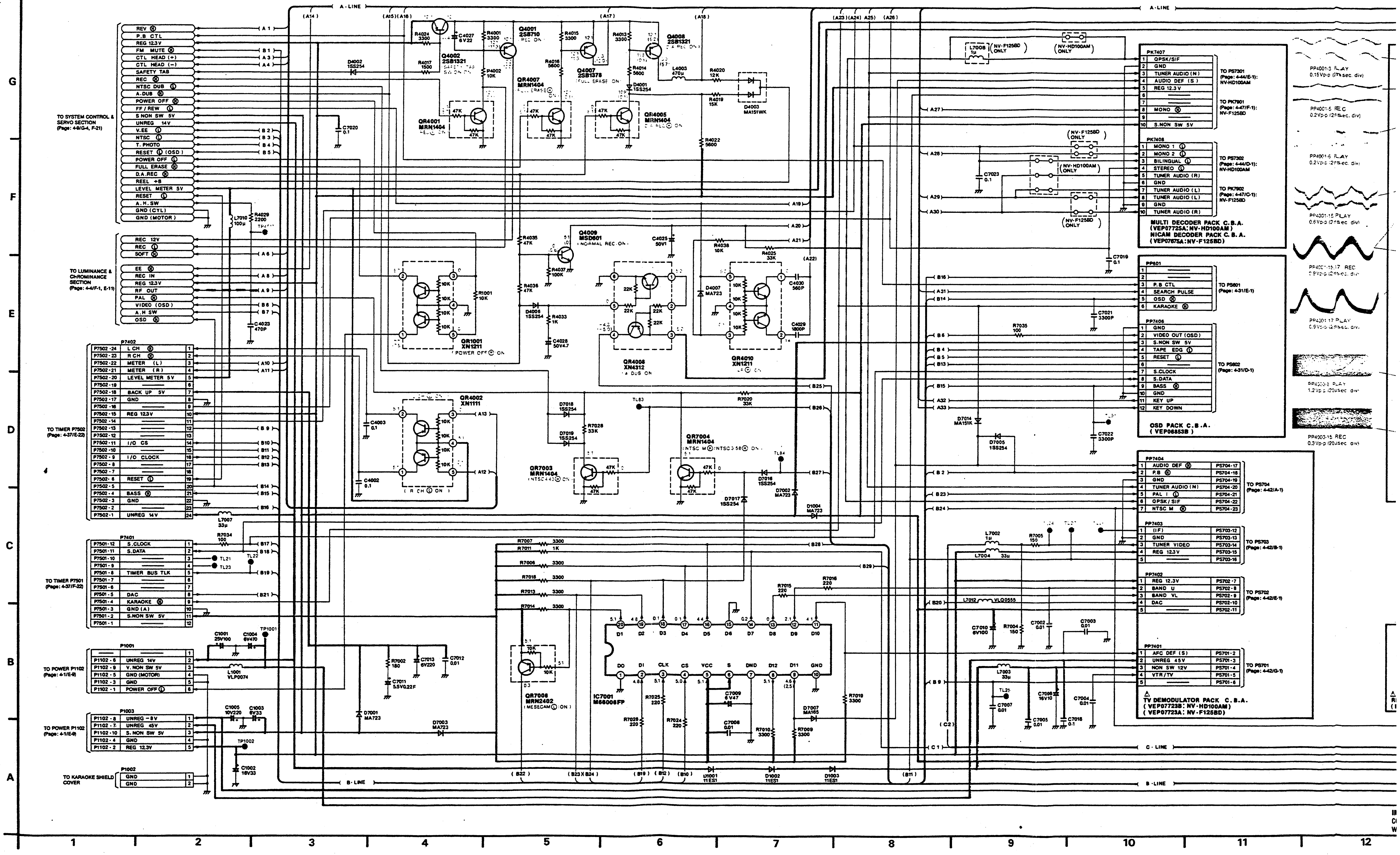


P2001
1 REG 5V
2 PG/FG
3 CYL. ET
4 CYL. GND
5 MOTOR REG
P2902
1 REG 5V
2 PG/FG
3 CYL ET
4 CYL GND
5 MOTOR REG
IC2901
AN3815K
IC2901-1,2,17 REC
5.0Vp-p (2msec. div)
POWER
MULTI PLICATION
EXT. SYNC
PG/FG DISP
MODE SELECT
1/16
OSC
PRESET
I.FACE
CDC
STOP DET
S.M.D.
BEMF DET
ROTATION DET.
TORQUE CONTROL
STOP
WAVE SHAPER
(TO CYLINDER MOTOR)
VM
M3
M2
M1
GND
HE-
HE+
VH
RESET Ⓛ
POWER OFF Ⓗ
FM MUTE Ⓗ
FULL ERASE Ⓗ
GND (MOTOR)
GND (CYL)
A. MODE SEL
D.A REC Ⓗ
FF/REW Ⓛ
REG 12.3V
S. NON SW 5V
REEL +B
P.B CTL
UNREG 14V
S.DATA
S.CLOCK
A.H SW
NTSC DUB Ⓛ
A.DUB Ⓗ
NON SW 12V
LEVEL METER 5V
POWER OFF Ⓛ
NTSC Ⓛ
TO AUDIO SECTION
(Page: 4-14/G-1, C-20)
CURR EMPH Ⓗ
D. FM REC Ⓛ
NTSC Ⓛ
TO LUMINANCE & CHROMINANCE SECTION
(Page: 4-4/D-1, D-11)
P2901
1 SP L
2 SP COM.
3 SP R
4 LP L
5 LP COM.
6 LP R
7 GND
8 A.HEAD L
9 A.HEAD COM.
10 A.HEAD R
11
12
TO HEAD AMP P502
(Page: 4-29/A-1)
(TO CYLINDER HEAD)
SP L
SP COM.
SP R
LP L
LP COM.
LP R
GND
A. HEAD L
A. HEAD COM.
A. HEAD R
CYLINDER DRIVE C.B.A. (VEX0126)
C-LINE
L2001 VLP0083
L2004 100μ
Q6001 MSD601
QP6011 MRN1404
QR6005 MRN1404
QR6002 MRN1404
Q6004 2SD655
Q2001 MSB709
QR2001 XN1213
D6005 1SS254
D2011 1SS254
D6008 MA723
D6009 MA723
D6012 SV03YS
TH2901 VRH0017
S. CLOCK
CAP. R/S/F
CURR. LIMIT
V. HEAD SW
LOADING Ⓗ
UNLOADING Ⓗ
PRE ROLL
EDIT TRIG/ REM PAUSE
V. CHANGE Ⓗ
SENSOR LED ON Ⓛ
VISS SEL/ REC SEL
DECK SEL/ CYL SEL
CM SKIP CLK
A. DUB Ⓗ
INSERT Ⓗ
SP Ⓗ
VTR Ⓗ
SERIAL CLK SEL
AUDIO H SW
CYL PG MM
CYL PFG
FM MUTE Ⓗ
FF/REW Ⓛ
CURR. EMPH Ⓗ
SLOW/STILL Ⓛ
A.EE Ⓗ
REV Ⓗ
A. MUTE Ⓗ
NTSC Ⓛ
REC Ⓗ
FULL. E Ⓗ
D.A. REC Ⓗ
D. REC Ⓗ
D. FM. REC Ⓗ
S. DATA
GND (A)
INFE
PB CTL IN(-)
PB CTL IN(+)
TPZ
CTL HEAD (-)
CTL HEAD (+)
OCH
PB CTL
CLP
GND
AGC
PB CTL OUT
+5V (A)
IC6001-63,64 REC
5.0Vp-p (5msec. div)
IC6001-60 REC
4.6Vp-p (10msec. div)
IC6001-45 PLAY
5.8Vp-p (5msec. div)
IC6001-43 REC
5.0Vp-p (10msec. div)
IC6001-41 PLAY
2.0Vp-p (5msec. div)
IC6001-27,28 REC
0.9Vp-p (0.5msec. div)
IC6001-34,35 REC
2.5Vp-p (10msec. div)
(FF/REW Ⓛ OFF)
15
16
17
18
19
20
21
22
23
24
25
26

NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

4-4. AUDIO SECTION IN MAIN SCHEMATIC DIAGRAM

VIDEO MAIN SIGNAL PATH IN REC MODE — VIDEO MAIN SIGNAL PATH IN PLAYBACK MO


A-LINE
B-LINE
C-LINE
TO SYSTEM CONTROL & SERVO SECTION (Page: 4-9/G-4, F-21)
REV Ⓗ
P.B CTL
REG 12.3V
FM MUTE Ⓗ
CTL HEAD (+)
CTL HEAD (−)
SAFETY TAB
REC Ⓗ
NTSC DUB Ⓛ
A.DUB Ⓗ
POWER OFF Ⓗ
FF/REW Ⓛ
S.NON SW 5V
UNREG 14V
V.EE Ⓛ
NTSC Ⓛ
T.PHOTO
RESET Ⓛ (OSD)
POWER OFF Ⓛ
FULL ERASE Ⓗ
D.A.REC Ⓗ
REEL +B
LEVEL METER 5V
RESET Ⓛ
A.H.SW
GND (CYL)
GND (MOTOR)
TO LUMINANCE & CHROMINANCE SECTION (Page: 4-4/F-1, E-11)
REC 12V
REC Ⓛ
SOFT Ⓗ
EE Ⓗ
REC IN
REG 12.3V
RF OUT
PAL Ⓗ
VIDEO (OSD)
A.H SW
OSD Ⓗ
TO TIMER P7502 (Page: 4-37/E-22)
P7402
L CH Ⓗ
R CH Ⓗ
METER (L)
METER (R)
LEVEL METER 5V
BACK UP 5V
GND
REG 12.3V
I/O CS
I/O CLOCK
RESET Ⓛ
BASS Ⓗ
GND
UNREG 14V
TO TIMER P7501 (Page: 4-37/F-22)
P7401
S.CLOCK
S.DATA
TIMER BUS TLK
DAC
KARAOKE Ⓗ
GND (A)
S.NON SW 5V
TO POWER P1102 (Page: 4-1/E-9)
P1001
UNREG 14V
V.NON SW 5V
GND (MOTOR)
GND
POWER OFF Ⓛ
TO POWER P1102 (Page: 4-1/E-9)
P1003
UNREG −8V
UNREG 45V
S.NON SW 5V
GND
REG 12.3V
TO KARAOKE SHIELD COVER
P1002
GND
GND
Q4001 2SB710 REC ON
Q4002 2SB1321 SAFETY TAB SW ON
Q4007 2SB1378 FULL ERASE ON
Q4008 2SB1321 D.A REC ON
QR4001 MRN1404 REC ON
QR4007 MRN1404 FULL ERASE ON
QR4005 MRN1404 D.A REC ON
D4002 1SS254
D4003 MA151WK
D4001 1SS254
L4003 470μ
Q4009 MSD601 NORMAL REC ON
QR1001 XN1211 POWER OFF ON
QR4008 XN4312 A DUB ON
QR4010 XN1211 LF ON
QR4002 XN1111 R CH ON
D4007 MA723
D4006 1SS254
D7018 1SS254
D7019 1SS254
QR7003 MRN1404 NTSC4.43 ON
QR7004 MRN1404 NTSC M ON NTSC3.58 ON
D7016 1SS254
D7017 1SS254
D7002 MA723
D1004 MA723
QR7008 MRN2402 MESECAM ON
IC7001 M66008FP
D1 D2 D3 D4 D5 D6 D7 D8 D9 D10
DO DI CLK CS VCC S DND D12 D11 GND
D7001 MA723
D7003 MA723
D7007 MA165
D1001 11ES1
D1002 11ES1
D1003 11ES1
TP1001
TP1002
TL21
TL22
TL23
TL83
TL84
L7010 100μ
L7007 33μ
L1001 VLP0074
L7008 1μ
L7002 1μ
L7004 33μ
L7012 VLQ0555
L7003 33μ
NV-F125BD ONLY
NV-HD100AM ONLY
PK7407
QPSK/SIF
GND
TUNER AUDIO (N)
AUDIO DEF (S)
REG 12.3V
MONO Ⓗ
S.NON SW 5V
TO PS7301 (Page: 4-44/E-1): NV-HD100AM
TO PK7901 (Page: 4-47/F-1): NV-F125BD
PK7408
MONO 1 Ⓛ
MONO 2 Ⓛ
BILINGUAL Ⓛ
STEREO Ⓛ
TUNER AUDIO (R)
GND
TUNER AUDIO (L)
TUNER AUDIO (L)
GND
TUNER AUDIO (R)
TO PS7302 (Page: 4-44/D-1): NV-HD100AM
TO PK7902 (Page: 4-47/C-1): NV-F125BD
MULTI DECODER PACK C.B.A. (VEP07725A: NV-HD100AM)
NICAM DECODER PACK C.B.A. (VEP07675A: NV-F125BD)
PP601
P.B CTL
SEARCH PULSE
OSD Ⓗ
KARAOKE Ⓗ
TO PS601 (Page: 4-31/E-1)
PP7406
GND
VIDEO OUT (OSD)
S.NON SW 5V
TAPE EDG Ⓛ
RESET Ⓛ
S.DATA
S.CLOCK
BASS Ⓗ
GND
KEY UP
KEY DOWN
TO PS602 (Page: 4-31/D-1)
OSD PACK C.B.A. (VEP06853B)
D7014 MA151K
D7005 1SS254
PP7404
AUDIO DEF Ⓗ
P.B Ⓗ
GND
TUNER AUDIO (N)
PAL I Ⓛ
QPSK/SIF
NTSC M Ⓗ
PS704-17
PS704-18
PS704-19
PS704-20
PS704-21
PS704-22
PS704-23
TO PS704 (Page: 4-42/A-1)
PP7403
(IF)
GND
TUNER VIDEO
REG 12.3V
PS703-12
PS703-13
PS703-14
PS703-15
PS703-16
TO PS703 (Page: 4-42/B-1)
PP7402
REG 12.3V
BAND U
BAND VL
DAC
PS702-7
PS702-8
PS702-9
PS702-10
PS702-11
TO PS702 (Page: 4-42/E-1)
PP7401
AFC DEF (S)
UNREG 45V
NON SW 12V
VTR/TV
PS701-2
PS701-3
PS701-4
PS701-5
PS701-6
TO PS701 (Page: 4-42/G-1)
TV DEMODULATOR PACK C.B.A. (VEP07723B: NV-HD100AM) (VEP07723A: NV-F125BD)
PP4001-3 PLAY 0.15Vp-p (2ms/div)
PP4001-5 REC 0.2Vp-p (2ms/div)
PP4001-6 PLAY 0.2Vp-p (2ms/div)
PP4001-15 PLAY 0.6Vp-p (2ms/div)
PP4001-15/17 REC 2.9Vp-p (2ms/div)
PP4001-17 PLAY 0.9Vp-p (2ms/div)
PP4003-8 PLAY 1.2Vp-p (20μs/div)
PP4003-15 REC 0.3Vp-p (20μs/div)
G
F
E
D
C
B
A
1
2
3
4
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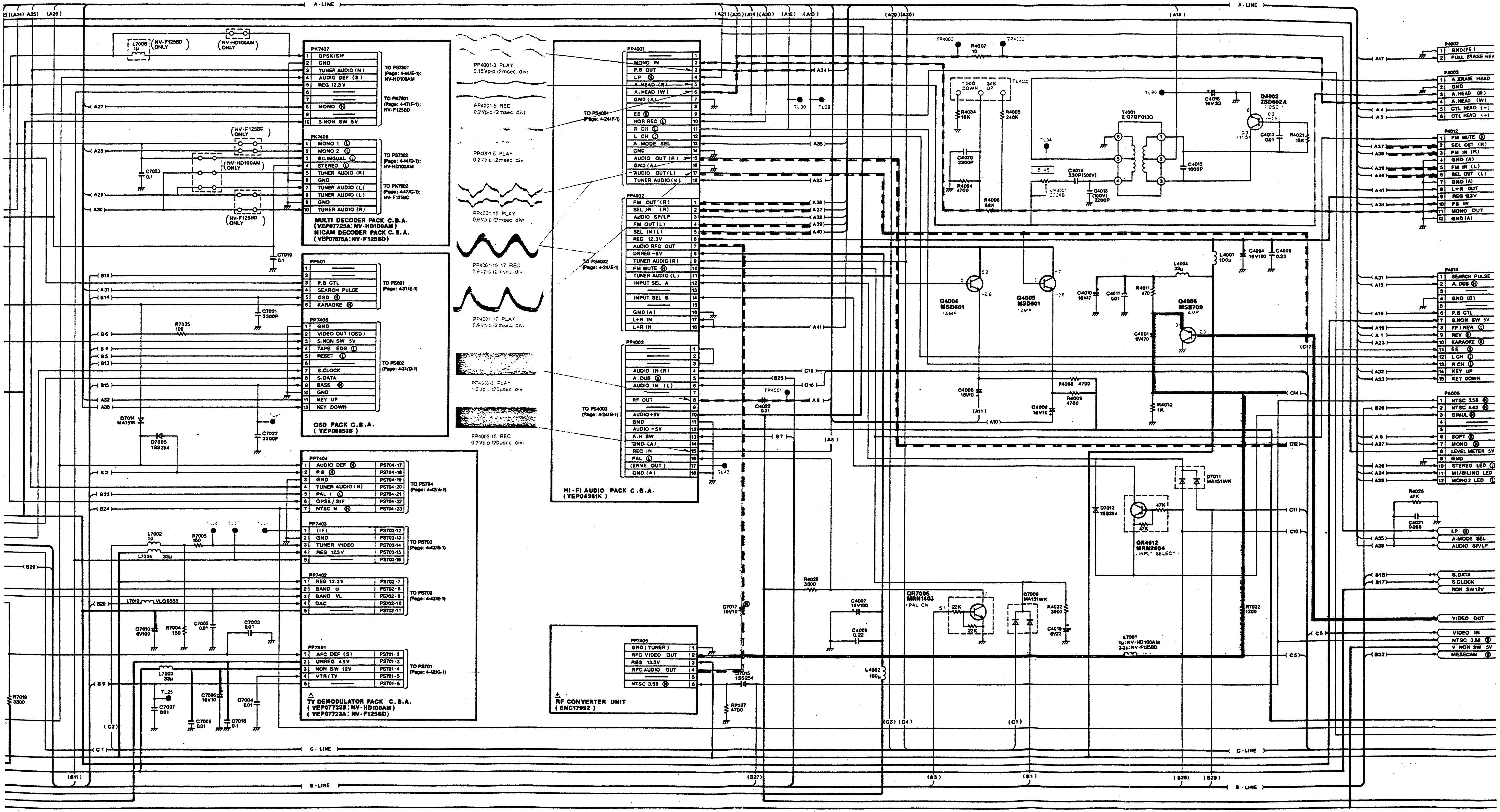
NAL PATH IN REC MODE —— VIDEO MAIN SIGNAL PATH IN PLAYBACK MODE AUDIO MAIN SIGNAL PATH IN REC MODE - - - AUDIO MAIN SIGNAL PATH IN PLAYBACK MODE


A-LINE
B-LINE
C-LINE
PK7407
PK7408
MULTI DECODER PACK C.B.A.
(VEP07725A: NV-HD100AM)
NICAM DECODER PACK C.B.A.
(VEP07675A: NV-F125BD)
PP601
PP7406
OSD PACK C.B.A.
(VEP06853B)
PP7404
PP7403
PP7402
PP7401
TV DEMODULATOR PACK C.B.A.
(VEP07723B: NV-HD100AM)
(VEP07723A: NV-F125BD)
PP4001
PP4002
PP4003
HI-FI AUDIO PACK C.B.A.
(VEP04361K)
PP7405
RF CONVERTER UNIT
(ENC17992)
PP4001-3 PLAY 0.15Vp-p (2msec. div)
PP4001-5 REC 0.2Vp-p (2msec. div)
PP4001-6 PLAY 0.2Vp-p (2msec. div)
PP4001-15 PLAY 0.6Vp-p (2msec. div)
PP4001-15, 17 REC 0.9Vp-p (2msec. div)
PP4001-17 PLAY 0.9Vp-p (2msec. div)
PP4003-8 PLAY 1.2Vp-p (20usec. div)
PP4003-15 REC 0.3Vp-p (20usec. div)
Q4003 2SD602A
Q4004 MSD601
Q4005 MSD601
Q4006 MSB709
QR4012 MRN2404 (INPUT SELECT)
QR7005 MRN1403
P4002
P4003
P4012
P4014
P6005
8
9
10
11
12
13
14
15
16
17
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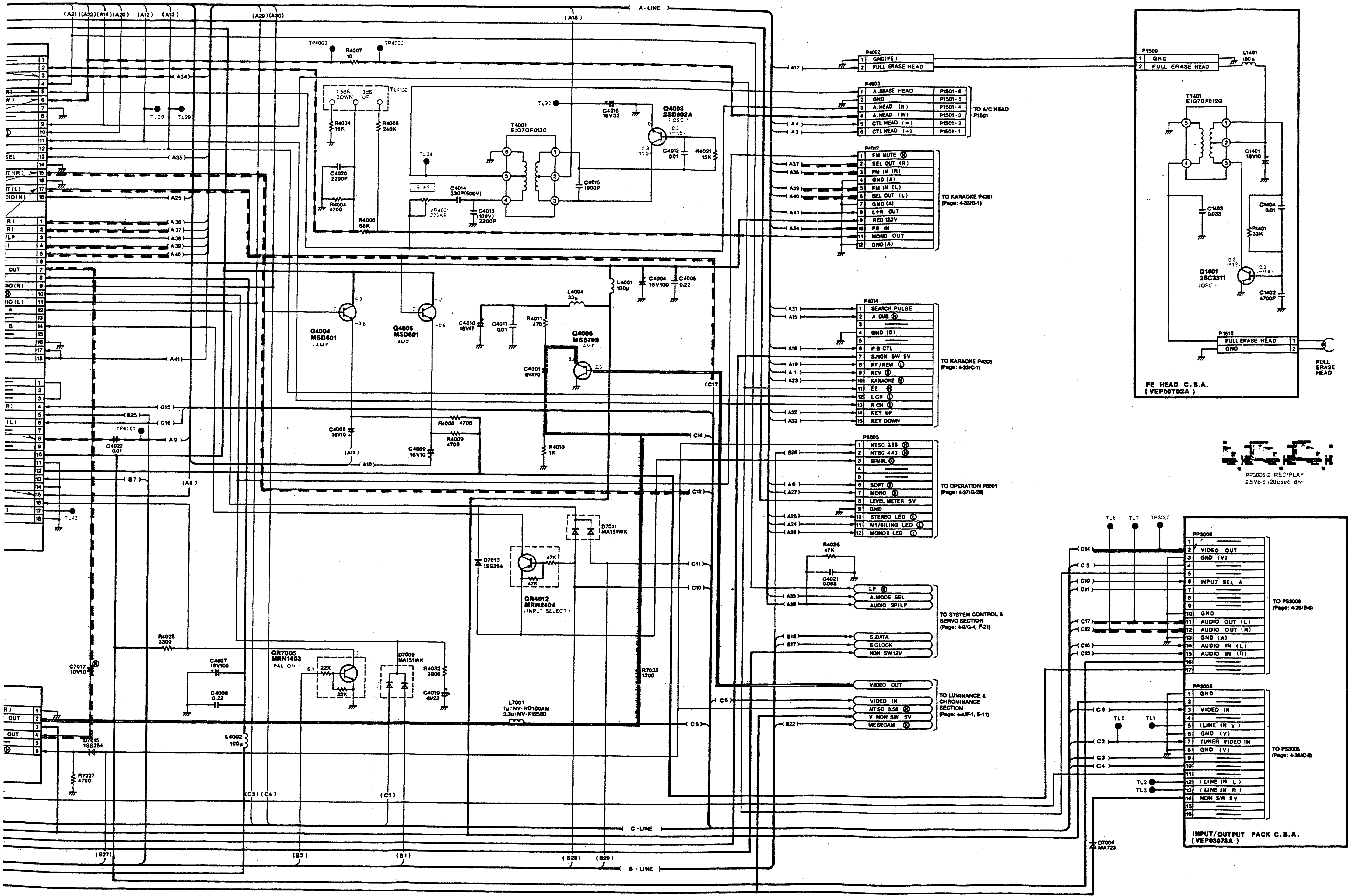
IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED WITH THE MARK ⚠ HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY.
WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SAME TYPE.

NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS ( ) ON THIS DIAGRAM IS RECORD MODE WITH PAL COLOUR SIGNAL. (SP MODE)

THE MEASUREMENT MODE OF TH
WITH PAL COLOUR SIGNAL. (SP

AUDIO MAIN SIGNAL PATH IN REC MODE ▬▬▬ AUDIO MAIN SIGNAL PATH IN PLAYBACK MODE


A-LINE
B-LINE
C-LINE
TP4003
R4007 10
TP4002
1.5dB DOWN
3dB UP
TL4100
R4034 16K
R4005 240K
C4020 2200P
R4004 4700
R4006 68K
BIAS
VR4001 220KB
C4014 330P(500V)
C4013 (100V) 2200P
T4001 EIQ7QF013Q
TL34
TL90
C4016 16V33
C4015 1000P
Q4003 2SD602A (OSC)
C4012 0.01
R4021 15K
L4001 100μ
C4004 16V100
C4005 0.22
L4004 33μ
Q4004 MSD601 (AMP)
Q4005 MSD601 (AMP)
C4010 16V47
C4011 0.01
R4011 470
Q4006 MSB709 (AMP)
C4001 6V470
C4006 16V10
C4009 16V10
R4008 4700
R4009 4700
R4010 1K
TP4501
C4022 0.01
TL43
D7011 MA151WK
D7013 1SS254
QR4012 MRN2404 (INPUT SELECT)
R4028 3300
C7017 10V10
C4007 16V100
C4008 0.22
QR7005 MRN1403 (PAL ON)
D7009 MA151WK
R4032 3900
C4019 6V22
R7032 1200
L7001 1μ: NV-HD100AM 3.3μ: NV-F125BD
L4002 100μ
D7015 1SS254
R7027 4700
P4002
1 GND(FE)
2 FULL ERASE HEAD
P4003
1 A.ERASE HEAD P1501-6
2 GND P1501-5
3 A.HEAD (R) P1501-4
4 A.HEAD (W) P1501-3
5 CTL HEAD (−) P1501-2
6 CTL HEAD (+) P1501-1
TO A/C HEAD P1501
P4012
1 FM MUTE Ⓗ
2 SEL OUT (R)
3 FM IN (R)
4 GND (A)
5 FM IN (L)
6 SEL OUT (L)
7 GND (A)
8 L+R OUT
9 REG 12.3V
10 PB IN
11 MONO OUT
12 GND (A)
TO KARAOKE P4301 (Page: 4-33/G-1)
P4014
1 SEARCH PULSE
2 A.DUB Ⓗ
4 GND (D)
6 P.B CTL
7 S.NON SW 5V
8 FF/REW Ⓛ
9 REV Ⓗ
10 KARAOKE Ⓗ
11 EE Ⓗ
12 L CH Ⓛ
13 R CH Ⓛ
14 KEY UP
15 KEY DOWN
TO KARAOKE P4305 (Page: 4-33/C-1)
P6005
1 NTSC 3.58 Ⓗ
2 NTSC 4.43 Ⓗ
3 SIMUL Ⓗ
6 SOFT Ⓗ
7 MONO Ⓗ
8 LEVEL METER 5V
9 GND
10 STEREO LED Ⓛ
11 M1/BILING LED Ⓛ
12 MONO2 LED Ⓛ
TO OPERATION P6501 (Page: 4-37/G-28)
R4026 47K
C4021 0.068
LP Ⓗ
A.MODE SEL
AUDIO SP/LP
S.DATA
S.CLOCK
NON SW 12V
TO SYSTEM CONTROL & SERVO SECTION (Page: 4-9/G-4, F-21)
VIDEO OUT
VIDEO IN
NTSC 3.58 Ⓗ
V NON SW 5V
MESECAM Ⓗ
TO LUMINANCE & CHROMINANCE SECTION (Page: 4-4/F-1, E-11)
P1509
1 GND
2 FULL ERASE HEAD
L1401 100μ
T1401 EIQ7QF012Q
C1401 16V10
C1403 0.033
C1404 0.01
R1401 33K
Q1401 2SC3311 (OSC)
C1402 4700P
P1512
FULL ERASE HEAD 1
GND 2
FULL ERASE HEAD
FE HEAD C.B.A. (VEP00T02A)
PP3006-2 REC/PLAY 2.5Vp-p (20μsec div)
TL6
TL7
TP3002
PP3006
2 VIDEO OUT
3 GND (V)
6 INPUT SEL A
10 GND
11 AUDIO OUT (L)
12 AUDIO OUT (R)
13 GND (A)
14 AUDIO IN (L)
15 AUDIO IN (R)
TO PS3006 (Page: 4-26/B-6)
PP3005
1 GND
3 VIDEO IN
5 (LINE IN V)
6 GND (V)
7 TUNER VIDEO IN
8 GND (V)
12 (LINE IN L)
13 (LINE IN R)
14 NON SW 5V
TO PS3005 (Page: 4-26/C-6)
TL0
TL1
TL2
TL3
D7004 MA723
INPUT/OUTPUT PACK C.B.A. (VEP03978A)

MARK ⚠ HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY.
MPONENTS, USE ONLY THE SAME TYPE.

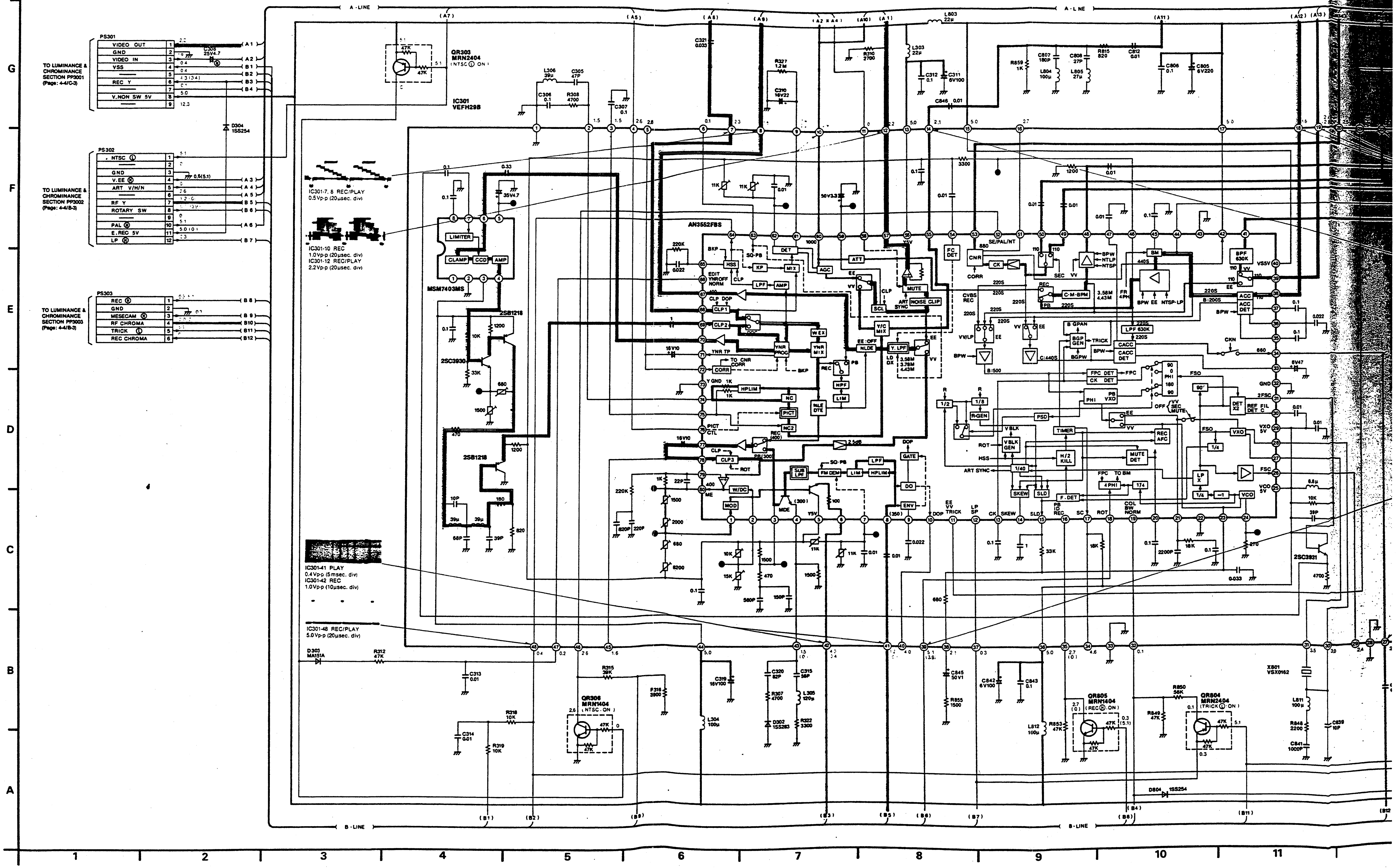
NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS ( ) ON THIS DIAGRAM IS RECORD MODE WITH PAL COLOUR SIGNAL. (SP MODE)

THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE WITH PAL COLOUR SIGNAL. (SP MODE)

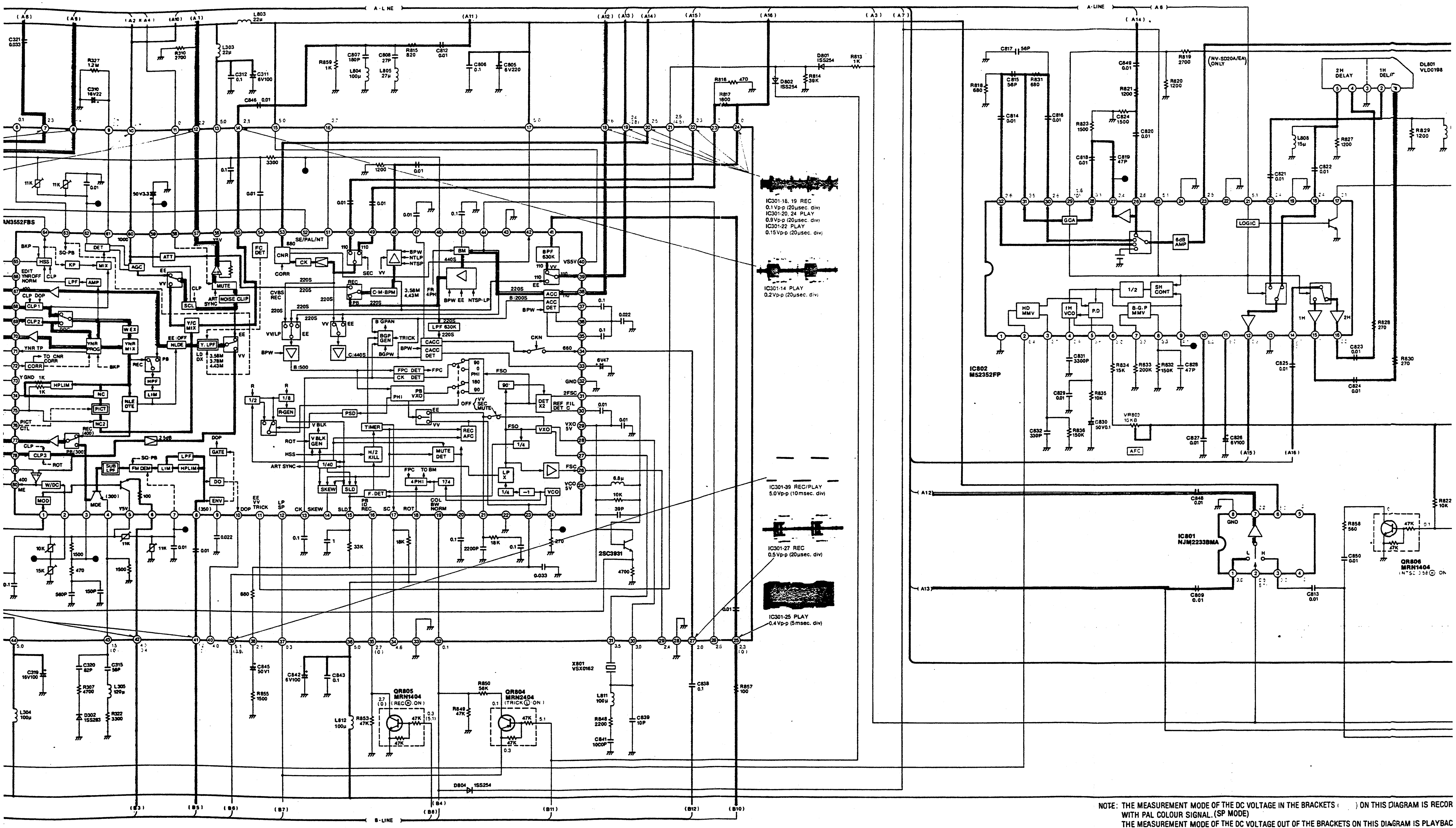
NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

14 15 16 17 18 19 20 21 22 23 24

4-5. LUMINANCE & CHROMINANCE PACK SCHEMATIC DIAGRAM


G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10
11
A-LINE
B-LINE
PS301
VIDEO OUT
GND
VIDEO IN
VSS
REC Y
V.NON SW 5V
TO LUMINANCE & CHROMINANCE SECTION PP3001 (Page: 4-4/C-3)
C308 25V4.7
D304 1SS254
PS302
NTSC Ⓛ
GND
V.EE Ⓗ
ART V/H/N
RF Y
ROTARY SW
PAL Ⓗ
E.REC 5V
LP Ⓗ
TO LUMINANCE & CHROMINANCE SECTION PP3002 (Page: 4-4/B-3)
PS303
REC Ⓗ
GND
MESECAM Ⓗ
RF CHROMA
TRICK Ⓛ
REC CHROMA
TO LUMINANCE & CHROMINANCE SECTION PP3003 (Page: 4-4/B-3)
QR303 MRN2404 (NTSC Ⓛ ON)
IC301 VEFH29B
IC301-7, 8 REC/PLAY 0.5Vp-p (20µsec. div)
IC301-10 REC 1.0Vp-p (20µsec. div)
IC301-12 REC/PLAY 2.2Vp-p (20µsec. div)
MSM7403MS
LIMITER
CLAMP
CCD
AMP
2SB1218
2SC3930
AN3552FBS
IC301-41 PLAY 0.4Vp-p (5msec. div)
IC301-42 REC 1.0Vp-p (10µsec. div)
IC301-48 REC/PLAY 5.0Vp-p (20µsec. div)
D303 MA151A
R312 47K
QR306 MRN1404 (NTSC ON)
QR805 MRN1404 (REC Ⓗ ON)
QR804 MRN2404 (TRICK Ⓛ ON)
2SC3931
X801 VSX0162
D804 1SS254
L803 22µ
L303 22µ
SE/PAL/NT
CNR
BPF 630K
ACC DET
FPC DET
CK DET
VXO
VCO
Y.LPF
NOISE CLIP
MUTE
FM DEM
W/DC
MOD
ENV
GATE
DO
SUB LPF
HPLIM
NLDE

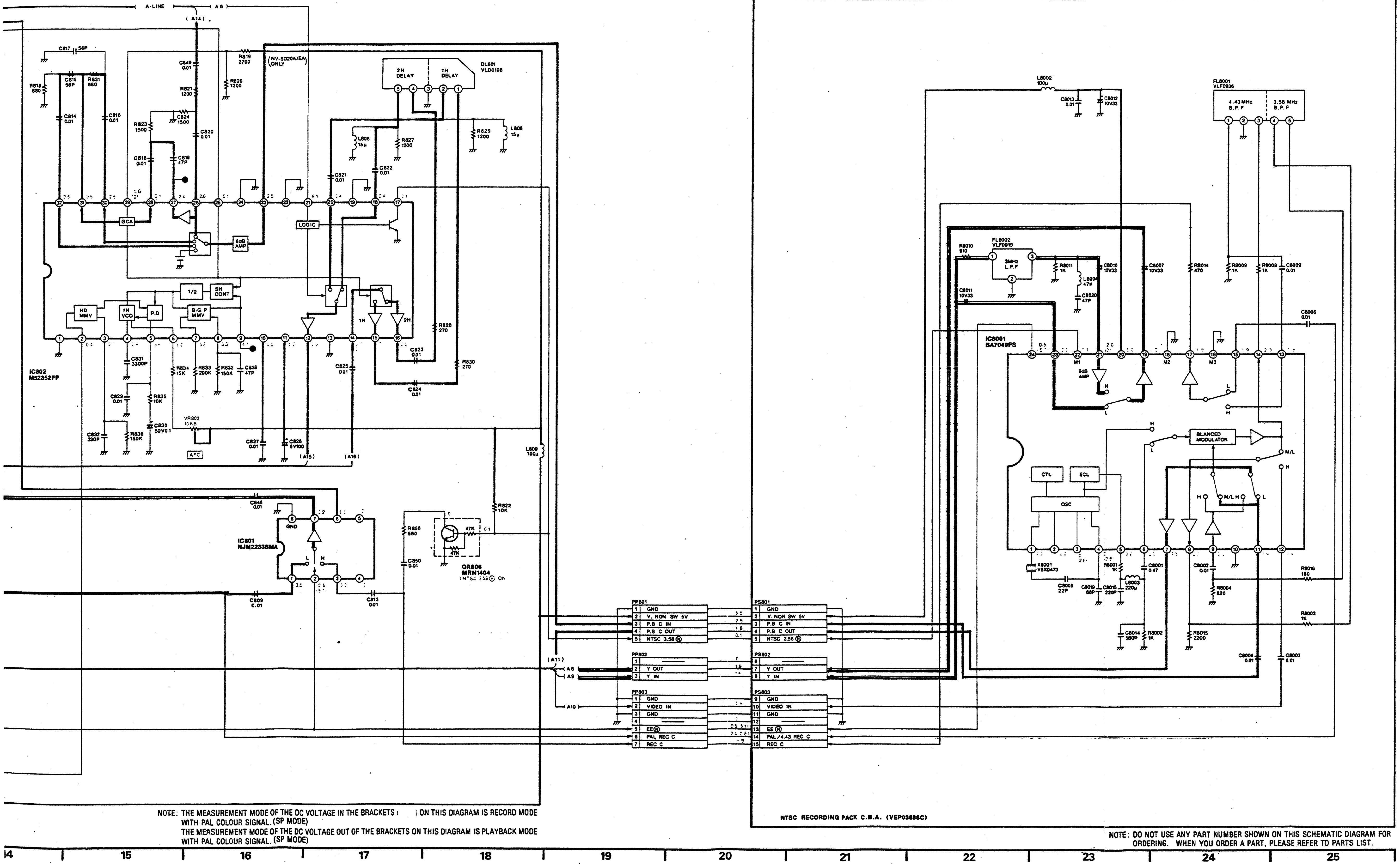
- - - - MAIN SIGNAL PATH IN REC MODE ▬▬ MAIN SIGNAL PATH IN PLAYBACK MOD


A-LINE
B-LINE
AN3552FBS
IC802
M52352FP
IC801
NJM2233BMA
DL801
VLD0198
2H DELAY
1H DELAY
X801
VSX0162
2SC3931
QR805
MRN1404
(REC ⓞ ON)
QR804
MRN2404
(TRICK ⓞ ON)
QR806
MRN1404
D801 1SS254
D802 1SS254
D804 1SS254
IC301-18, 19 REC
0.1Vp-p (20μsec. div)
IC301-20, 24 PLAY
0.9Vp-p (20μsec. div)
IC301-22 PLAY
0.15Vp-p (20μsec. div)
IC301-14 PLAY
0.2Vp-p (20μsec. div)
IC301-39 REC/PLAY
5.0Vp-p (10msec. div)
IC301-27 REC
0.5Vp-p (20μsec. div)
IC301-25 PLAY
0.4Vp-p (5msec. div)
(NV-SD20A/EA) ONLY
LOGIC
GCA
6dB AMP
MD MMV
1H VCO
P.D
B.G.P MMV
1/2
SH CONT
AFC
VR803 10KB
SE/PAL/NT
CNR
CK
C-M-BPM
BM
BPW EE NTSP-LP
BPF 630K
ACC
ACC DET
LPF 630K
BGP GEN
CACC
CACC DET
FPC DET
CK DET
PB VXO
PSD
R-GEN
V BLK
V BLK GEN
TIMER
H/2 KILL
MUTE DET
REC AFC
1/40
SKEW
SLD
F. DET
4PHI
1/4
VXO
VCO
LPF X
DET X2
REF FIL DET C
90°
HSS
KP
MIX
DET
AGC
ATT
FC DET
MUTE
ART SYNC
NOISE CLIP
SCL
Y/C MIX
NLDE
Y. LPF
YNR PROG
YNR MIX
W EX
HPF
LIM
NLE DTE
NC
NC2
PICT
CLP1
CLP2
CLP3
CORR
HPLIM
LPF
AMP
FM DEM
SUB LPF
W/DC
MOD
ENV
DO
GATE

7
8
9
10
11
12
13
14
15
16
17
18

NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS ( ) ON THIS DIAGRAM IS RECOR
WITH PAL COLOUR SIGNAL. (SP MODE)
THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBAC
WITH PAL COLOUR SIGNAL. (SP MODE)

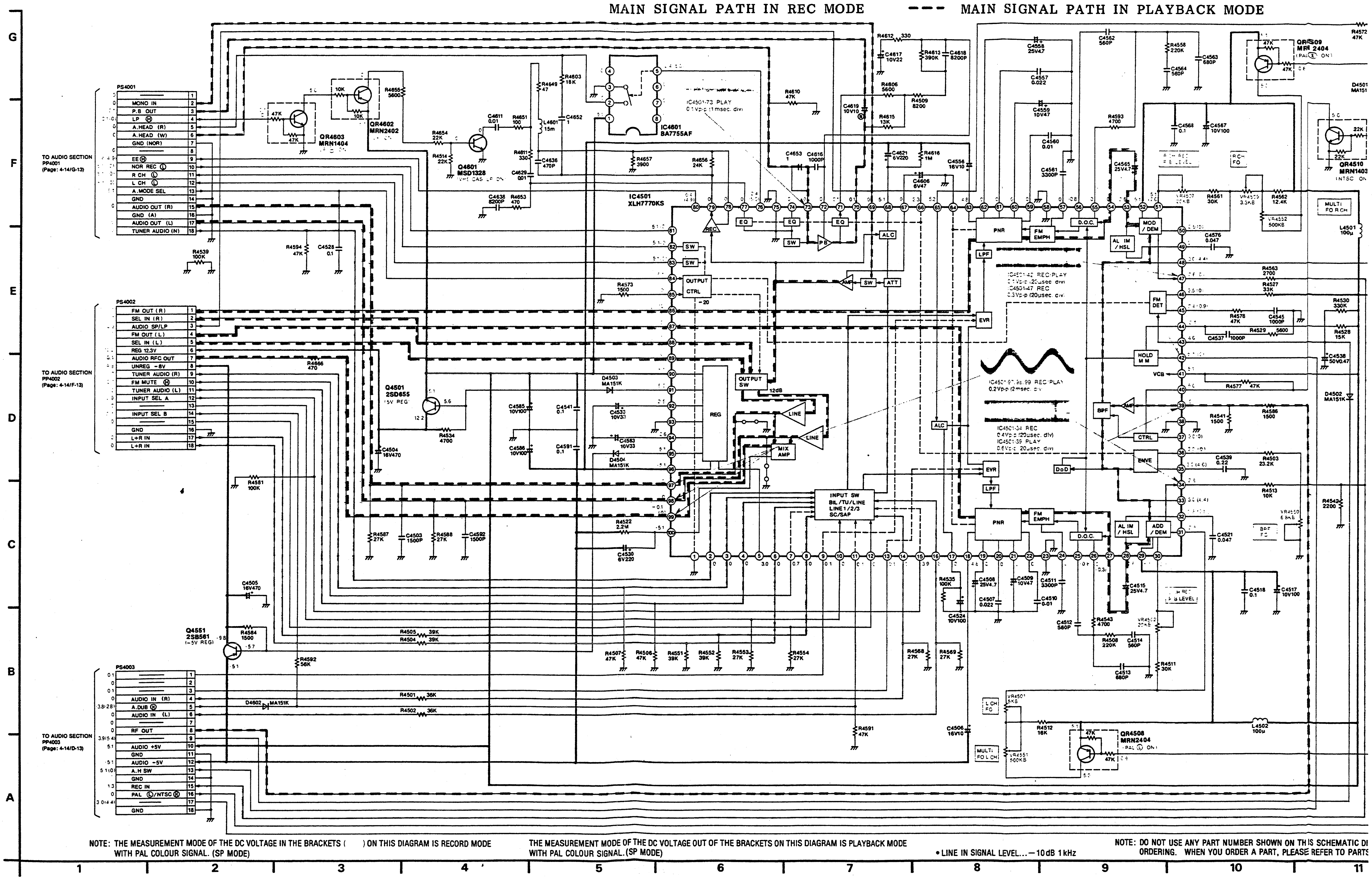
EC MODE ——— MAIN SIGNAL PATH IN PLAYBACK MODE


A-LINE
A6
A14
(NV-SD20A/EA) ONLY
DL801 VLD0198
2H DELAY
1H DELAY
GCA
6dB AMP
LOGIC
1/2
SH CONT
HD MMV
1H VCO
P.D
B.G.P MMV
AFC
IC802 M52352FP
IC801 NJM2233BMA
GND
QR806 MRN1404
A15
A16
A11
A8
A9
A10
L809 100μ
R822 10K
R858 560
C850 0.01
C848 0.01
C809 0.01
C813 0.01
PP801
1 GND
2 V. NON SW 5V
3 P.B C IN
4 P.B C OUT
5 NTSC 3.58 Ⓗ
PP802
1 —
2 Y OUT
3 Y IN
PP803
1 GND
2 VIDEO IN
3 GND
4 —
5 EE Ⓗ
6 PAL REC C
7 REC C
PS801
1 GND
2 V. NON SW 5V
3 P.B C IN
4 P.B C OUT
5 NTSC 3.58 Ⓗ
PS802
6 —
7 Y OUT
8 Y IN
PS803
9 GND
10 VIDEO IN
11 GND
12 —
13 EE Ⓗ
14 PAL/4.43 REC C
15 REC C
L8002 100μ
FL8001 VLF0936
4.43 MHz B.P.F
3.58 MHz B.P.F
FL8002 VLF0919
3MHz L.P.F
IC8001 BA7049FS
6dB AMP
M1
M2
M3
BLANCED MODULATOR
M/L
CTL
ECL
OSC
X8001 VSX0473
NTSC RECORDING PACK C.B.A. (VEP03888C)
14
15
16
17
18
19
20
21
22
23
24
25

NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS ( ) ON THIS DIAGRAM IS RECORD MODE WITH PAL COLOUR SIGNAL. (SP MODE)
THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE WITH PAL COLOUR SIGNAL. (SP MODE)

NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

4-6. Hi-Fi AUDIO PACK SCHEMATIC DIAGRAM


MAIN SIGNAL PATH IN REC MODE
--- MAIN SIGNAL PATH IN PLAYBACK MODE
G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10
11
PS4001
MONO IN
P.B OUT
LP Ⓗ
A.HEAD (R)
A.HEAD (W)
GND (NOR)
EE Ⓗ
NOR REC Ⓛ
R CH Ⓛ
L CH Ⓛ
A.MODE SEL
GND
AUDIO OUT (R)
GND (A)
AUDIO OUT (L)
TUNER AUDIO (N)
TO AUDIO SECTION PP4001 (Page: 4-14/G-13)
PS4002
FM OUT (R)
SEL IN (R)
AUDIO SP/LP
FM OUT (L)
SEL IN (L)
REG 12.3V
AUDIO RFC OUT
UNREG -8V
TUNER AUDIO (R)
FM MUTE Ⓗ
TUNER AUDIO (L)
INPUT SEL A
INPUT SEL B
GND
L+R IN
L+R IN
TO AUDIO SECTION PP4002 (Page: 4-14/F-13)
PS4003
AUDIO IN (R)
A.DUB Ⓗ
AUDIO IN (L)
RF OUT
AUDIO +5V
GND
AUDIO -5V
A.H SW
GND
REC IN
PAL Ⓛ/NTSC Ⓗ
GND
TO AUDIO SECTION PP4003 (Page: 4-14/D-13)
QR4603 MRN1404
QR4602 MRN2402
Q4601 MSD1328
IC4601 BA7755AF
IC4501 XLH7770KS
Q4501 2SD655
Q4551 2SB561
QR4508 MRN2404
QR4509 MRN2404
QR4510 MRN1403
D4503 MA151K
D4504 MA151K
D4602 MA151K
D4501 MA151
D4502 MA151K
L4601 15m
L4501 100μ
L4502 100μ
REC
PB
EQ
SW
ALC
OUTPUT CTRL
OUTPUT SW
REG
LINE
MIX AMP
INPUT SW BIL/TU/LINE LINE1/2/3 SC/SAP
PNR
FM EMPH
D.O.C.
MOD /DEM
AL IM /HSL
LPF
EVR
FM DET
HOLD MM
VCB
BPF
AMP
CTRL
ENVE
DoD
ADD /DEM
ATT
IC4501-73 PLAY 0.1Vp-p (1msec. div)
IC4501-42 REC/PLAY 0.1Vp-p (20μsec. div) IC4501-47 REC 0.3Vp-p (20μsec. div)
IC4501-91,92,99 REC/PLAY 0.2Vp-p (2msec. div)
IC4501-34 REC 0.4Vp-p (20μsec. div) IC4501-39 PLAY 0.6Vp-p (20μsec. div)
MULTI FO R.CH
MULTI FO L.CH
L CH FO
R CH FO
R4612 330
R4613 390K
C4618 8200P
C4617 10V22
R4606 5600
R4509 8200
R4615 13K
R4610 47K
C4619 10V10
R4616 1M
C4621 6V220
C4556 16V10
C4606 6V47
C4653 1
C4616 1000P
R4657 3900
R4656 24K
R4655 5600
R4654 22K
R4514 22K
C4611 0.01
R4651 100
C4652 1
R4649 47
R4603 18K
R4611 330
C4636 470P
C4629 .001
C4638 8200P
R4653 470
R4594 47K
C4528 0.1
R4539 100K
R4373 1500
R4666 470
C4585 10V100
C4541 0.1
C4533 10V33
C4583 10V33
C4586 10V100
C4591 0.1
C4504 16V470
R4534 4700
R4581 100K
R4587 27K
C4503 1500P
R4588 27K
C4592 1500P
R4522 2.2M
C4530 6V220
C4505 16V470
R4584 1500
R4505 39K
R4504 39K
R4592 56K
R4501 36K
R4502 36K
R4507 47K
R4506 47K
R4551 39K
R4552 39K
R4553 27K
R4554 27K
R4568 27K
R4569 27K
R4591 47K
R4535 100K
C4508 25V4.7
C4509 10V47
C4511 3300P
C4507 0.022
C4510 0.01
C4524 10V100
C4512 560P
R4543 4700
R4508 220K
C4514 560P
C4513 680P
R4511 30K
C4506 16V10
R4512 16K
VR4501 5KB
VR4551 500KB
C4515 25V4.7
VR4502 20KB
C4521 0.047
C4518 0.1
C4517 10V100
C4558 25V47
C4557 0.022
C4559 10V47
C4560 0.01
C4561 3300P
C4562 560P
R4558 220K
C4563 680P
C4564 560P
C4565 25V4.7
C4568 0.1
C4567 10V100
R4593 4700
R4561 30K
VR4527 20KB
VR4529 3.3KB
R4562 12.4K
VR4552 500KB
C4576 0.047
R4563 2700
R4527 33K
R4578 47K
C4545 1000P
R4529 5600
C4537 1000P
R4577 47K
R4541 1500
R4586 1500
C4539 0.22
R4503 23.2K
R4513 10K
R4530 330K
R4528 15K
C4538 50V0.47
R4542 2200
VR4550 6.8KB
R4572 47K
12dB
-20
R CH REC FB LEVEL
L CH REC FB LEVEL

NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS ( ) ON THIS DIAGRAM IS RECORD MODE WITH PAL COLOUR SIGNAL. (SP MODE)

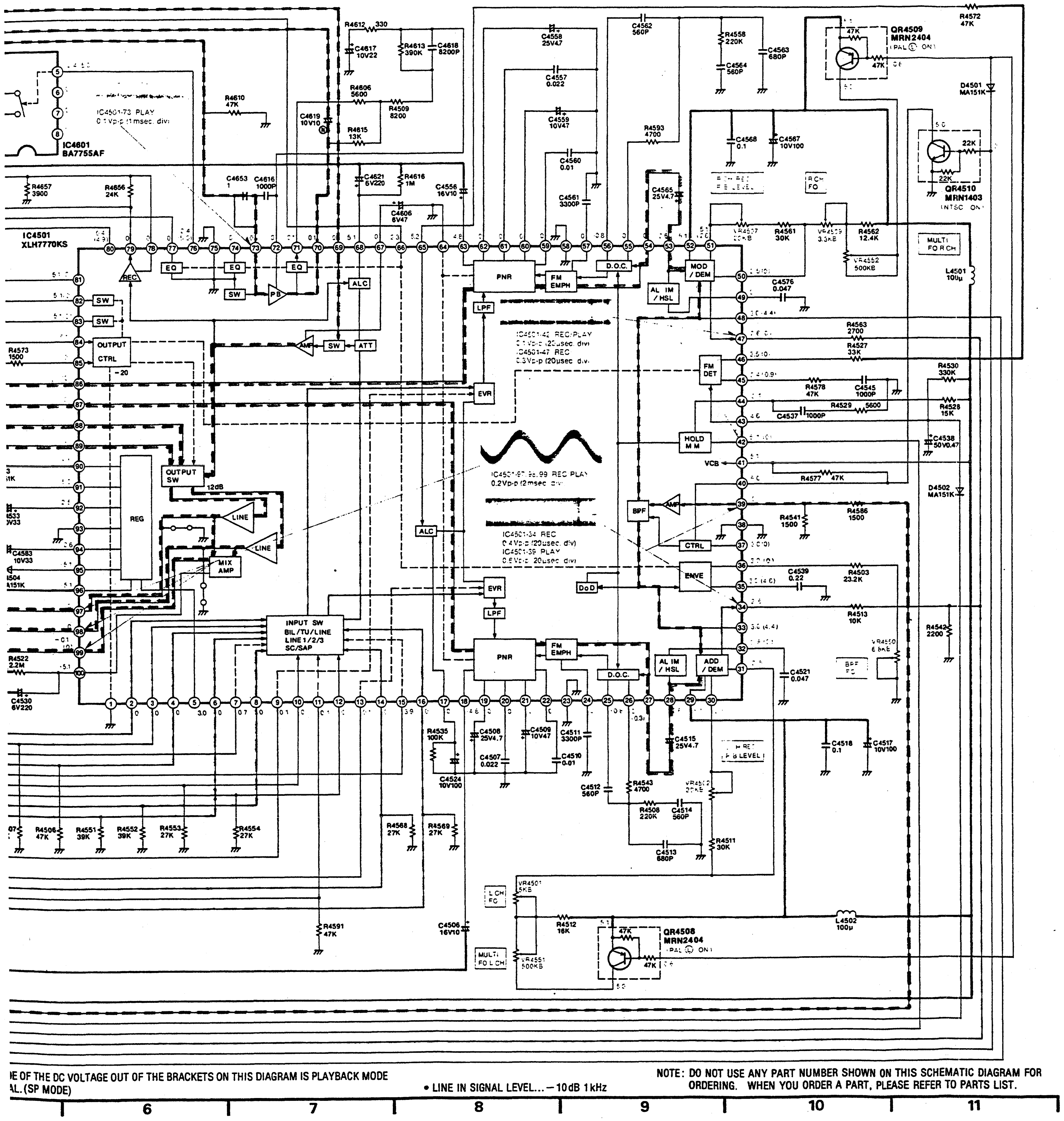
THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE WITH PAL COLOUR SIGNAL. (SP MODE)

• LINE IN SIGNAL LEVEL...—10dB 1kHz

NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DI ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS

4-7. INPUT/OUTPUT PACK SCHEMATIC DIAGRAM

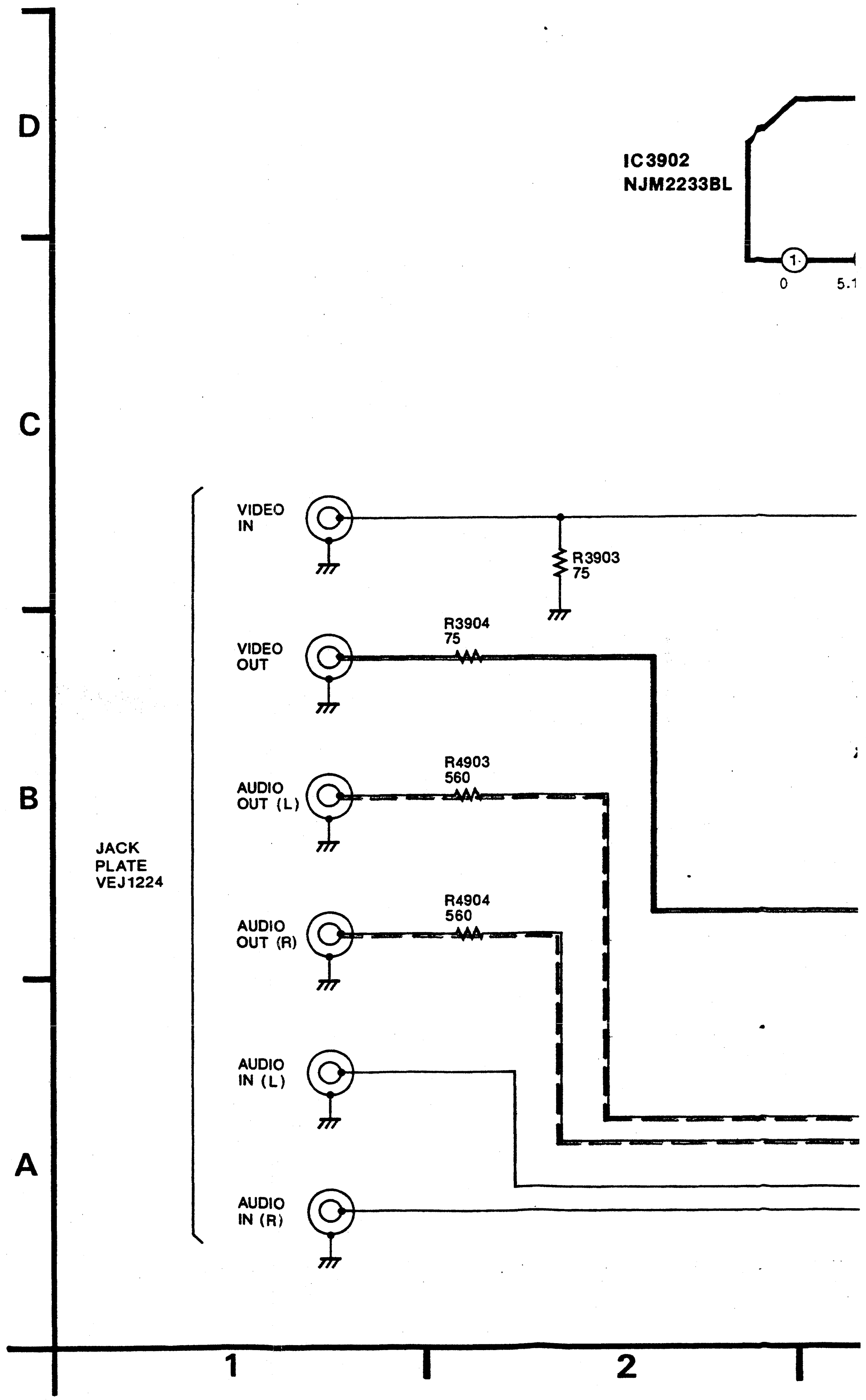
IAIN SIGNAL PATH IN REC MODE ‒ ‒ ‒ MAIN SIGNAL PATH IN PLAYBACK MODE


IC4601
BA7755AF
IC4501
XLH7770KS
IC4501-73 PLAY
0.1Vp-p (1msec. div)
REC
PB
EQ
SW
ALC
AMP
ATT
OUTPUT CTRL
OUTPUT SW
12dB
REG
LINE
MIX AMP
INPUT SW
BIL/TU/LINE
LINE 1/2/3
SC/SAP
EVR
LPF
PNR
FM EMPH
D.O.C.
MOD / DEM
AL IM / HSL
FM DET
HOLD M M
VCB
BPF
CTRL
ENVE
DoD
ADD / DEM
IC4501-42 REC/PLAY
0.1Vp-p (20μsec. div)
IC4501-47 REC
0.3Vp-p (20μsec. div)
IC4501-97 to 99 REC PLAY
0.2Vp-p (2msec. div)
IC4501-34 REC
0.4Vp-p (20μsec. div)
IC4501-39 PLAY
0.5Vp-p (20μsec. div)
QR4509
MRN2404
(PAL ⓛ ON)
QR4510
MRN1403
(NTSC ON)
QR4508
MRN2404
(PAL ⓛ ON)
D4501
MA151K
D4502
MA151K
L4501
100μ
L4502
100μ
MULTI FO R CH
MULTI FO L CH
L CH FO
R CH FO
R CH REC FM LEVEL
L REC FM LEVEL
6
7
8
9
10
11

IE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE
AL. (SP MODE)

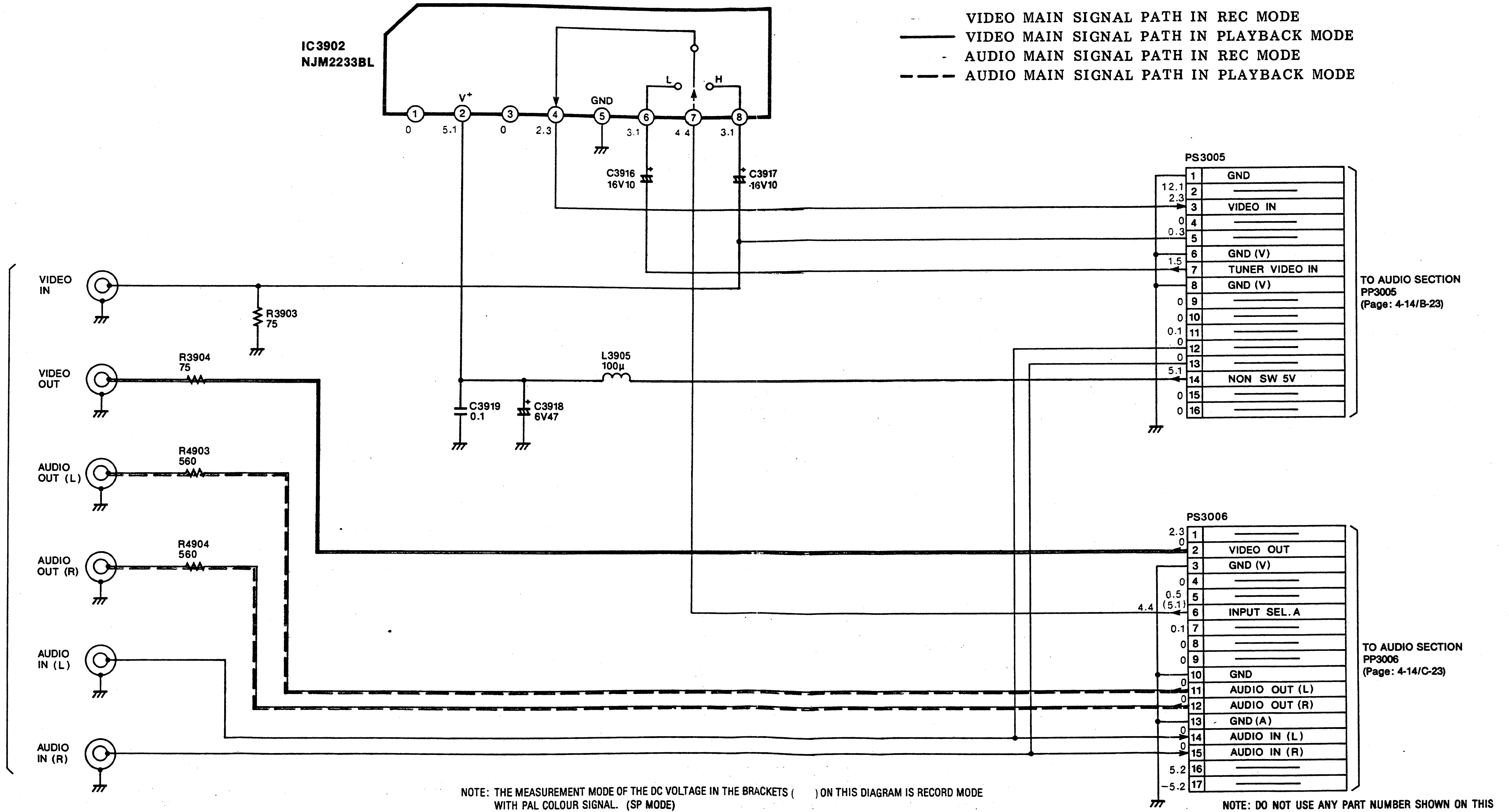
• LINE IN SIGNAL LEVEL....−10dB 1kHz

NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.


D
C
B
A
IC3902
NJM2233BL
1
0
5.1
VIDEO IN
R3903
75
VIDEO OUT
R3904
75
AUDIO OUT (L)
R4903
560
AUDIO OUT (R)
R4904
560
AUDIO IN (L)
AUDIO IN (R)
JACK PLATE
VEJ1224
1
2

E

UT/OUTPUT PACK SCHEMATIC DIAGRAM



IC3902
NJM2233BL
V+
GND
L
H
1
2
3
4
5
6
7
8
0
5.1
0
2.3
3.1
4.4
3.1
C3916
16V10
C3917
16V10
VIDEO IN
R3903
75
VIDEO OUT
R3904
75
L3905
100µ
C3919
0.1
C3918
6V47
AUDIO OUT (L)
R4903
560
AUDIO OUT (R)
R4904
560
AUDIO IN (L)
AUDIO IN (R)
PS3005
1 GND
2
3 VIDEO IN
4
5
6 GND (V)
7 TUNER VIDEO IN
8 GND (V)
9
10
11
12
13
14 NON SW 5V
15
16
12.1
2.3
0
0.3
1.5
0
0
0.1
0
0
5.1
0
0
TO AUDIO SECTION
PP3005
(Page: 4-14/B-23)
PS3006
1
2 VIDEO OUT
3 GND (V)
4
5
6 INPUT SEL. A
7
8
9
10 GND
11 AUDIO OUT (L)
12 AUDIO OUT (R)
13 GND (A)
14 AUDIO IN (L)
15 AUDIO IN (R)
16
17
2.3
0
0
0.5
(5.1)
4.4
0.1
0
0
0
0
0
0
5.2
−5.2
TO AUDIO SECTION
PP3006
(Page: 4-14/C-23)

VIDEO MAIN SIGNAL PATH IN REC MODE
VIDEO MAIN SIGNAL PATH IN PLAYBACK MODE
AUDIO MAIN SIGNAL PATH IN REC MODE
AUDIO MAIN SIGNAL PATH IN PLAYBACK MODE

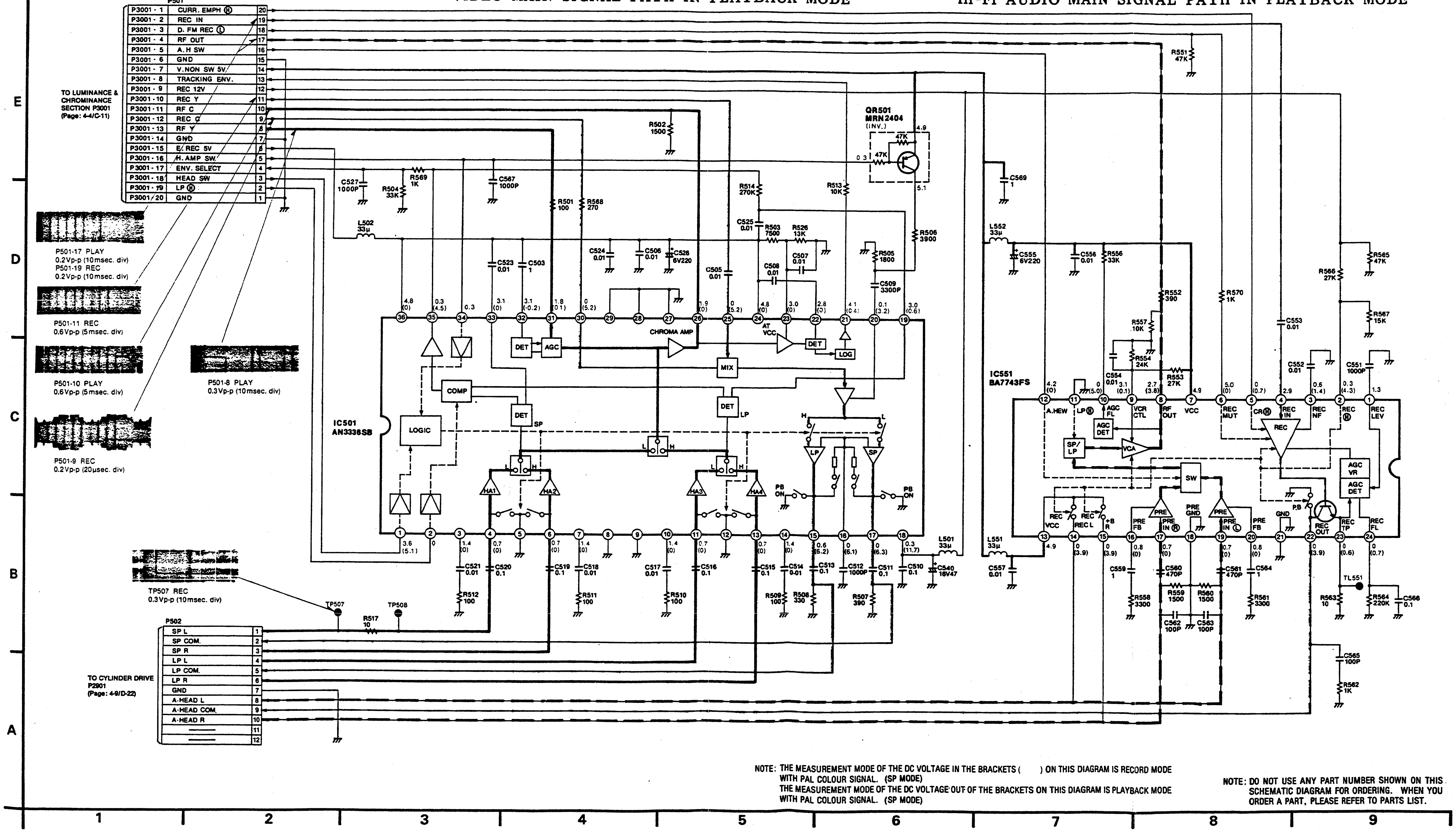
NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS ( ) ON THIS DIAGRAM IS RECORD MODE WITH PAL COLOUR SIGNAL. (SP MODE)
THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE WITH PAL COLOUR SIGNAL. (SP MODE)

NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

1 2 3 4 5 6

4-8. HEAD AMP SCHEMATIC DIAGRAM

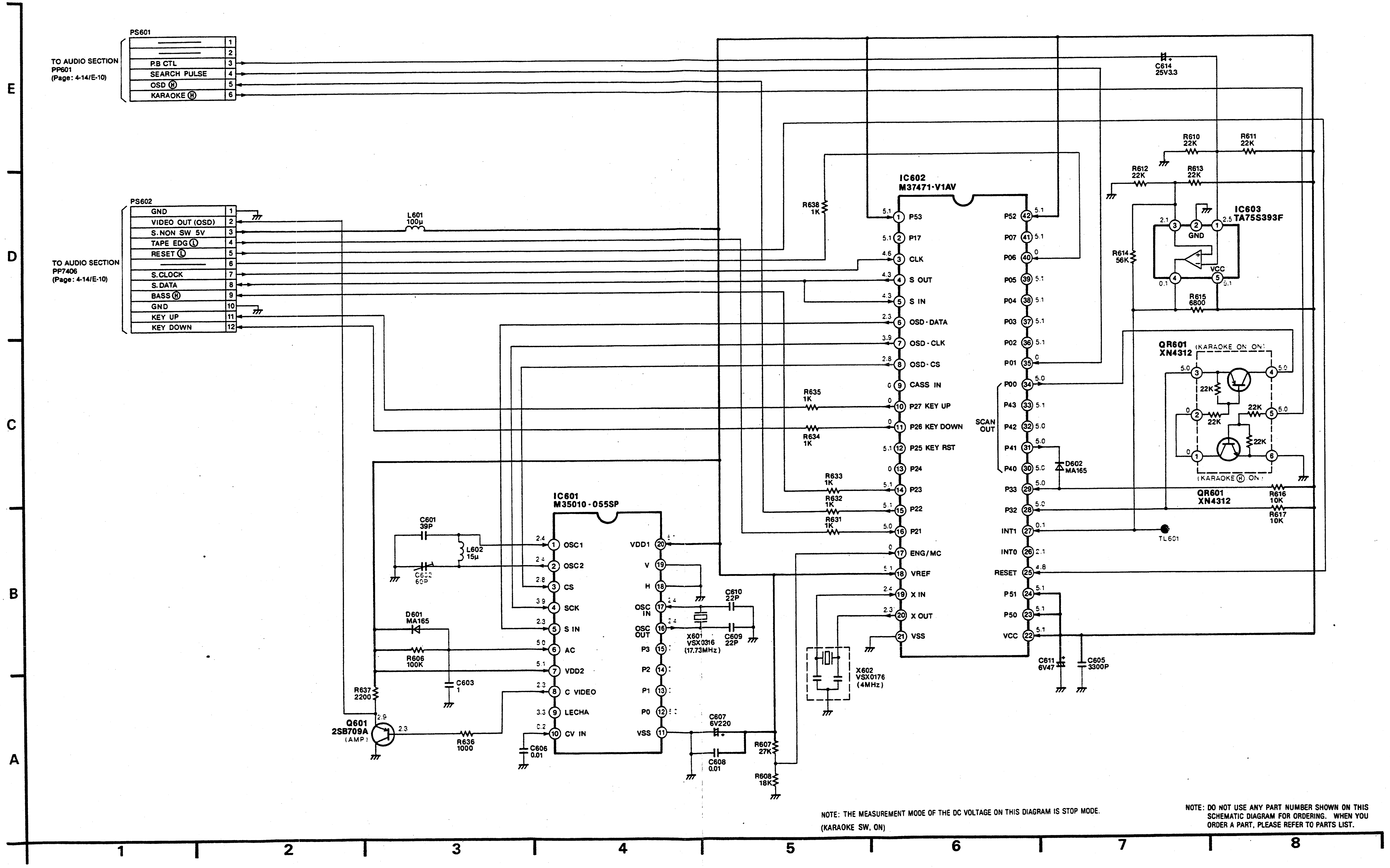
VIDEO MAIN SIGNAL PATH IN REC MODE
VIDEO MAIN SIGNAL PATH IN PLAYBACK MODE
Hi-Fi AUDIO MAIN SIGNAL PATH IN REC MODE
Hi-Fi AUDIO MAIN SIGNAL PATH IN PLAYBACK MODE


P501
P3001 - 1 CURR. EMPH Ⓗ 20
P3001 - 2 REC IN 19
P3001 - 3 D. FM REC Ⓛ 18
P3001 - 4 RF OUT 17
P3001 - 5 A. H SW 16
P3001 - 6 GND 15
P3001 - 7 V. NON SW 5V 14
P3001 - 8 TRACKING ENV. 13
P3001 - 9 REC 12V 12
P3001 - 10 REC Y 11
P3001 - 11 RF C 10
P3001 - 12 REC C 9
P3001 - 13 RF Y 8
P3001 - 14 GND 7
P3001 - 15 E/ REC 5V 6
P3001 - 16 H. AMP SW 5
P3001 - 17 ENV. SELECT 4
P3001 - 18 HEAD SW 3
P3001 - 19 LP Ⓗ 2
P3001/20 GND 1
TO LUMINANCE & CHROMINANCE SECTION P3001 (Page: 4-4/C-11)
P501-17 PLAY 0.2Vp-p (10msec. div)
P501-19 REC 0.2Vp-p (10msec. div)
P501-11 REC 0.6Vp-p (5msec. div)
P501-10 PLAY 0.6Vp-p (5msec. div)
P501-8 PLAY 0.3Vp-p (10msec. div)
P501-9 REC 0.2Vp-p (20µsec. div)
TP507 REC 0.3Vp-p (10msec. div)
IC501 AN3336SB
QR501 MRN2404 (INV.)
IC551 BA7743FS
CHROMA AMP
MIX
DET
AGC
COMP
LOGIC
HA1
HA2
HA3
HA4
LP
SP
PB ON
LOG
A.HEW
SP/LP
AGC DET
VCA
SW
REC VCC
PRE GND
REC MUT
REC NF
REC LEV
AGC VR
REC TP
REC FL
REC OUT
TP507
TP508
TL551
P502
SP L 1
SP COM. 2
SP R 3
LP L 4
LP COM. 5
LP R 6
GND 7
A-HEAD L 8
A-HEAD COM. 9
A-HEAD R 10
11
12
TO CYLINDER DRIVE P2901 (Page: 4-9/D-22)
A
B
C
D
E
1
2
3
4
5
6
7
8
9

NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS ( ) ON THIS DIAGRAM IS RECORD MODE WITH PAL COLOUR SIGNAL. (SP MODE)
THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE WITH PAL COLOUR SIGNAL. (SP MODE)

NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

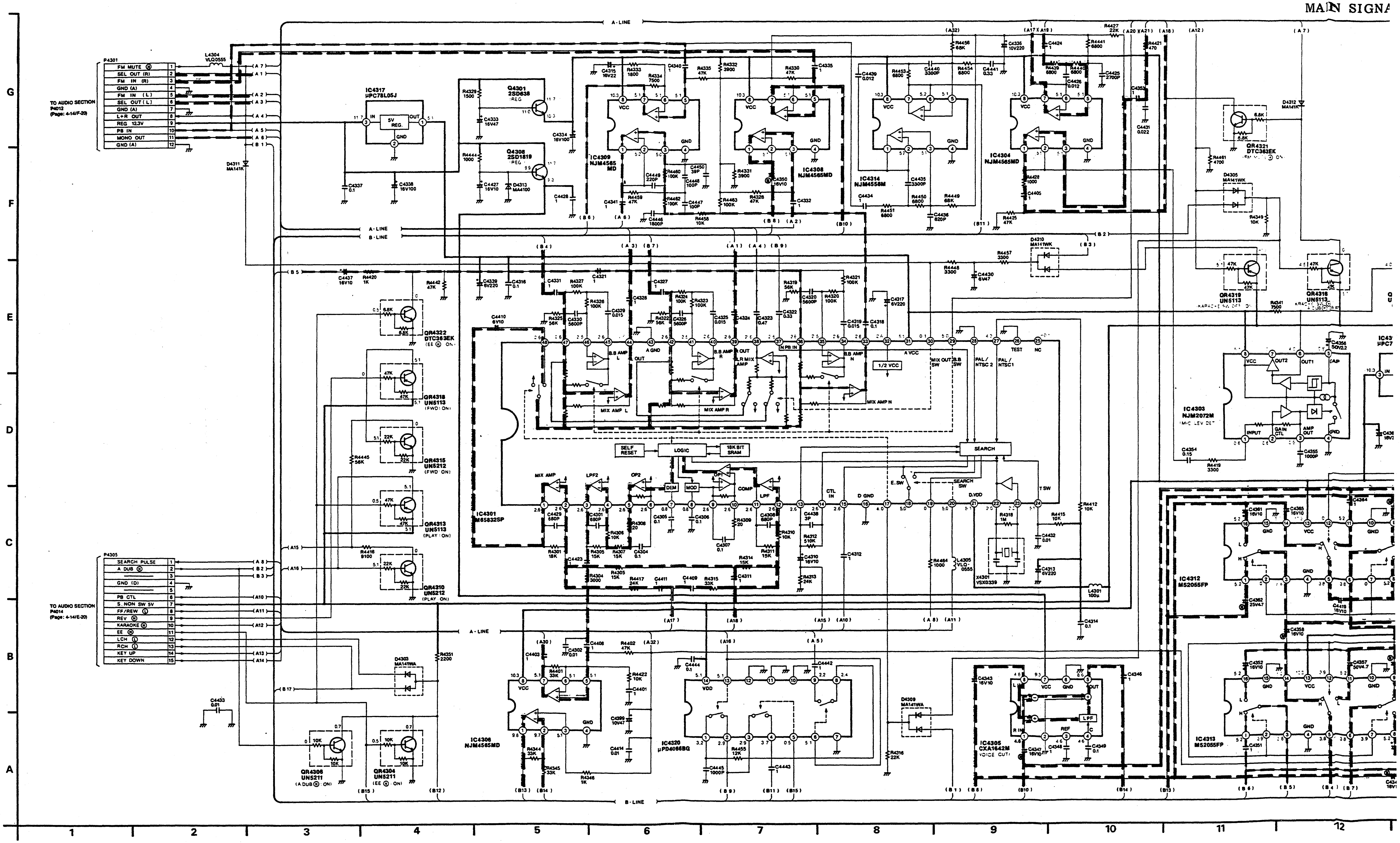
4-9. OSD PACK SCHEMATIC DIAGRAM


E
D
C
B
A
1
2
3
4
5
6
7
8
PS601
TO AUDIO SECTION
PP601
(Page: 4-14/E-10)
P.B CTL
SEARCH PULSE
OSD Ⓗ
KARAOKE Ⓗ
PS602
TO AUDIO SECTION
PP7406
(Page: 4-14/E-10)
GND
VIDEO OUT (OSD)
S.NON SW 5V
TAPE EDG Ⓛ
RESET Ⓛ
S.CLOCK
S.DATA
BASS Ⓗ
GND
KEY UP
KEY DOWN
L601
100μ
C614
25V3.3
IC602
M37471-V1AV
P53
P17
CLK
S OUT
S IN
OSD-DATA
OSD-CLK
OSD-CS
CASS IN
P27 KEY UP
P26 KEY DOWN
P25 KEY RST
P24
P23
P22
P21
ENG/MC
VREF
X IN
X OUT
VSS
P52
P07
P06
P05
P04
P03
P02
P01
P00
P43
P42
P41
P40
P33
P32
INT1
INT0
RESET
P51
P50
VCC
SCAN OUT
R638
1K
R635
1K
R634
1K
R633
1K
R632
1K
R631
1K
D602
MA165
X602
VSX0176
(4MHz)
C611
6V47
C605
3300P
R610
22K
R611
22K
R612
22K
R613
22K
IC603
TA75S393F
GND
VCC
R614
56K
R615
6800
QR601
XN4312
(KARAOKE ON ON)
22K
22K
22K
22K
(KARAOKE Ⓗ ON)
QR601
XN4312
R616
10K
R617
10K
TL601
IC601
M35010-055SP
OSC1
OSC2
CS
SCK
S IN
AC
VDD2
C VIDEO
LECHA
CV IN
VDD1
V
H
OSC IN
OSC OUT
P3
P2
P1
P0
VSS
C601
39P
L602
15μ
C602
60P
D601
MA165
R606
100K
C603
1
R637
2200
Q601
2SB709A
(AMP)
R636
1000
C606
0.01
C610
22P
X601
VSX0316
(17.73MHz)
C609
22P
C607
6V220
C608
0.01
R607
27K
R608
18K

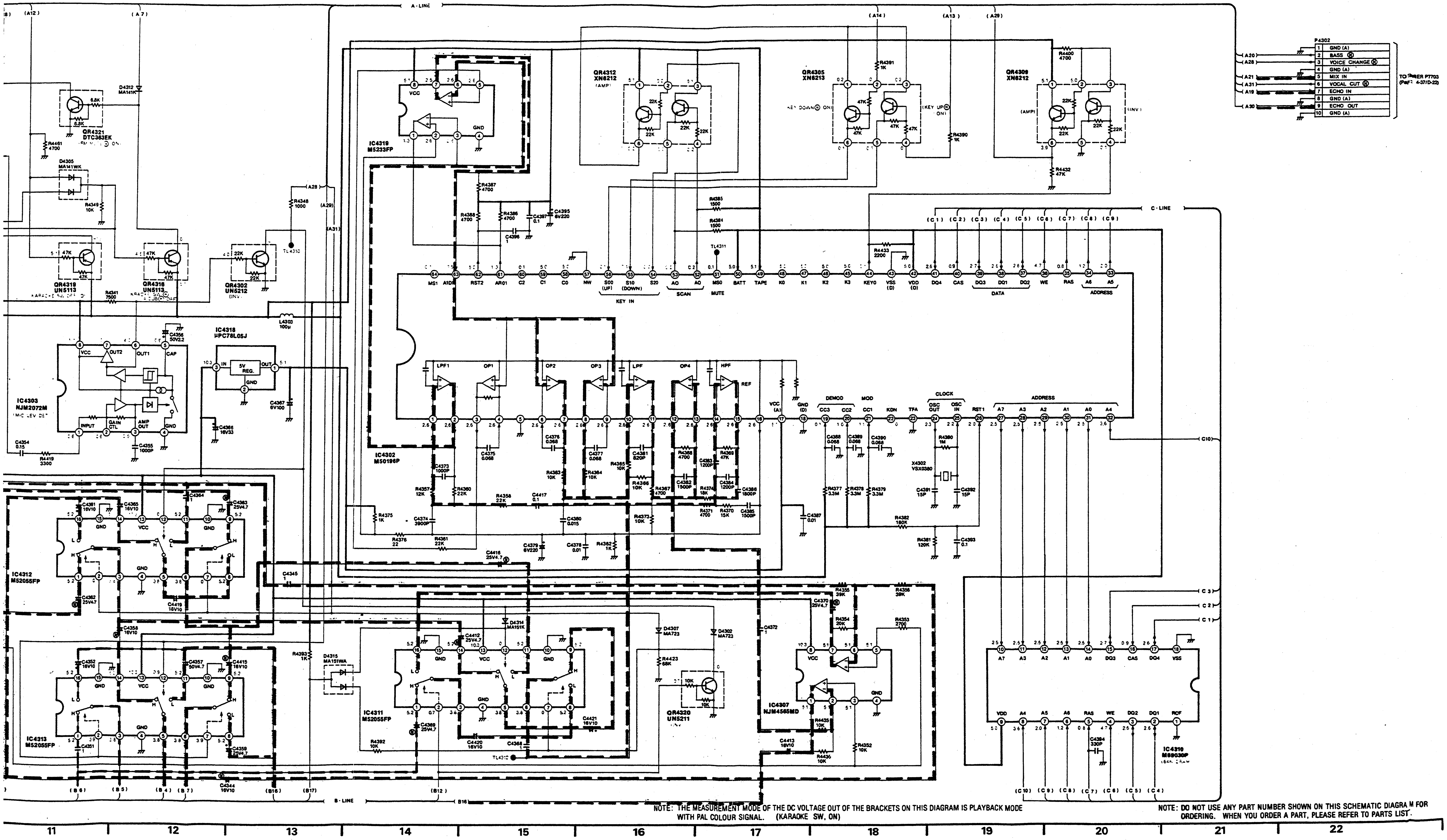
NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.
(KARAOKE SW. ON)

NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

4-10. KARAOKE SCHEMATIC DIAGRAM


MAIN SIGNA
P4301
FM MUTE
SEL OUT (R)
FM IN (R)
GND (A)
FM IN (L)
SEL OUT (L)
GND (A)
L+R OUT
REG 12.3V
PB IN
MONO OUT
GND (A)
TO AUDIO SECTION P4012 (Page: 4-14/F-20)
L4304 VLQ0555
D4311 MA141K
IC4317 µPC78L05J
5V REG.
Q4301 2SD638
Q4308 2SD1819
D4313 MA4100
IC4309 NJM4565MD
IC4308 NJM4565MD
IC4314 NJM4558M
IC4304 NJM4565MD
QR4321 DTC363EK
D4312 MA141K
D4305 MA141WK
D4310 MA141WK
QR4319 UN5113
QR4316 UN5113
A-LINE
B-LINE
QR4322 DTC363EK
QR4318 UN5113
QR4315 UN5212
QR4313 UN5113
QR4310 UN5212
IC4301 M65832SP
B.B AMP L
B.B AMP R
B.B AMP N
MIX AMP L
MIX AMP R
MIX AMP N
R MIX AMP
1/2 VCC
A VCC
MIX OUT SW
B.B SW
PAL / NTSC 2
PAL / NTSC1
TEST
NC
SELF RESET
LOGIC
16K BIT SRAM
SEARCH
MIX AMP
LPF2
OP2
OP1
DEM
MOD
COMP
LPF
CTL IN
D GND
E.SW
SEARCH SW
D.VDD
TSW
X4301 VSX0339
L4305 VLQ0555
L4301 100µ
IC4303 NJM2072M
IC4312 M52055FP
IC4313 M52055FP
P4305
SEARCH PULSE
A DUB
GND (D)
PB CTL
S.NON SW 5V
FF/REW
REV
KARAOKE
EE
LCH
RCH
KEY UP
KEY DOWN
TO AUDIO SECTION P4014 (Page: 4-14/E-20)
D4303 MA141WA
D4309 MA141WA
QR4306 UN5211
QR4304 UN5211
IC4306 NJM4565MD
IC4320 µPD4066BG
IC4305 CXA1642M VOICE CUT
1 2 3 4 5 6 7 8 9 10 11 12
G F E D C B A

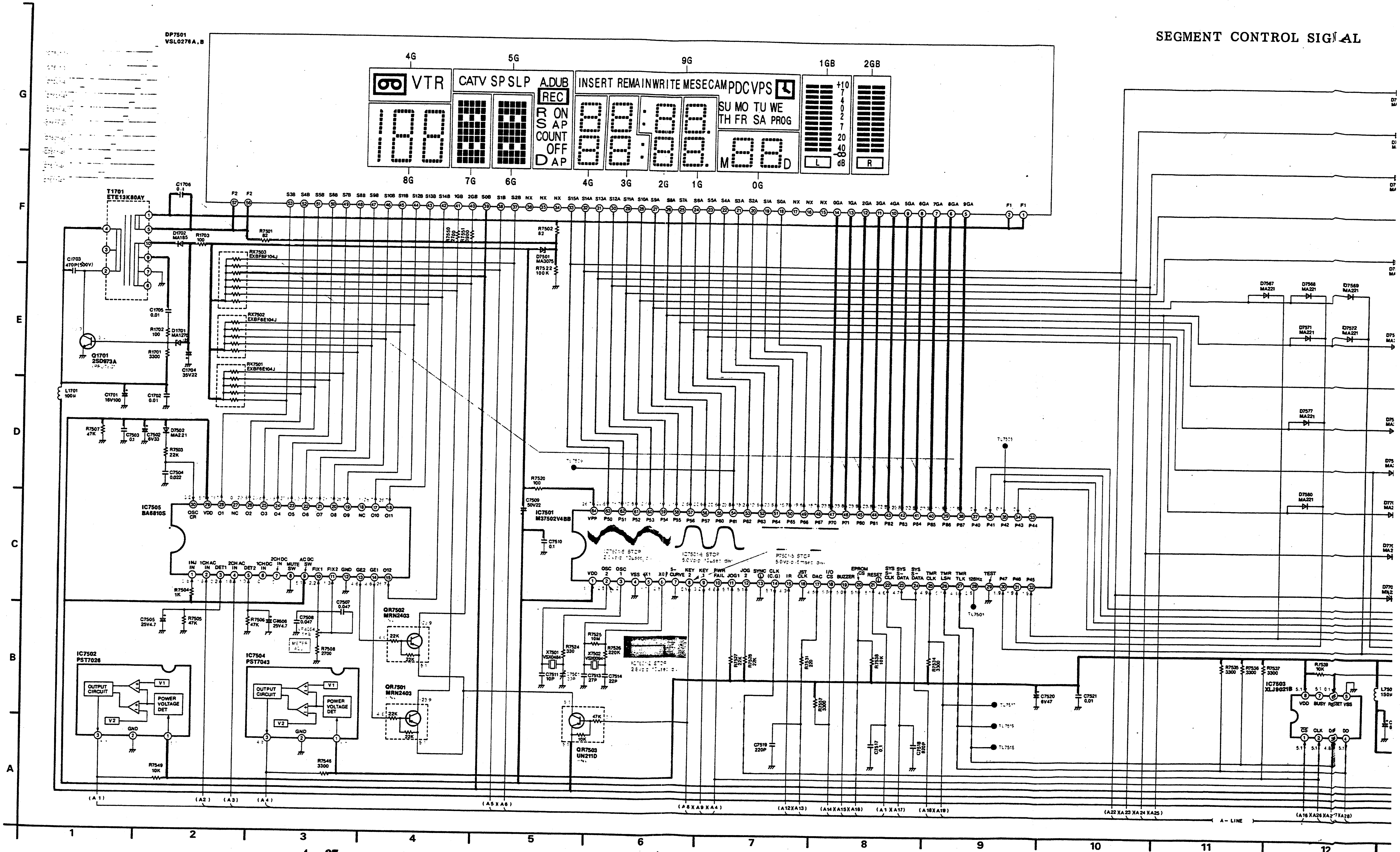
MAIN SIGNAL PATH IN REC MODE ——— MAIN SIGNAL PATH IN PLAYBACK MODE


A-LINE
B-LINE
C-LINE
QR4321 DTC363EK
QR4319 UN5113
QR4316 UN5113
QR4302 UN5212 (INV)
IC4303 NJM2072M (MIC LEV DET)
IC4318 μPC78L05J
5V REG.
IC4319 M5233FP
QR4312 XN6212 (AMP)
QR4305 XN6213
KEY DOWN ON
KEY UP ON
QR4309 XN6212
(AMP)
(INV)
P4302
1 GND (A)
2 BASS
3 VOICE CHANGE
4 GND (A)
5 MIX IN
6 VOCAL CUT
7 ECHO IN
8 GND (A)
9 ECHO OUT
10 GND (A)
TO TUNER P7703 (Page 4-37/D-22)
IC4302 M50196P
MS1 A1D RST2 AR01 C2 C1 C0 NW S00 (UP) S10 (DOWN) S20 AO AO MS0 BATT TAPE K0 K1 K2 K3 KEY0 VSS (D) VDD (D) DQ4 CAS DQ3 DQ1 DQ2 WE RAS A6 A5
KEY IN
SCAN
MUTE
DATA
ADDRESS
LPF1 OP1 OP2 OP3 LPF OP4 HPF REF
VCC (A) GND (D) CC3 CC2 CC1 KDN TFA OSC OUT OSC IN RST1 A7 A3 A2 A1 A0 A4
DEMOD MOD CLOCK
X4302 VSX0380
IC4312 M52055FP
IC4313 M52055FP
IC4311 M52055FP
IC4307 NJM4565MD
QR4320 UN5211
IC4310 M68030P (64K DRAM)
TL4310 TL4311 TL4312
11 12 13 14 15 16 17 18 19 20 21 22

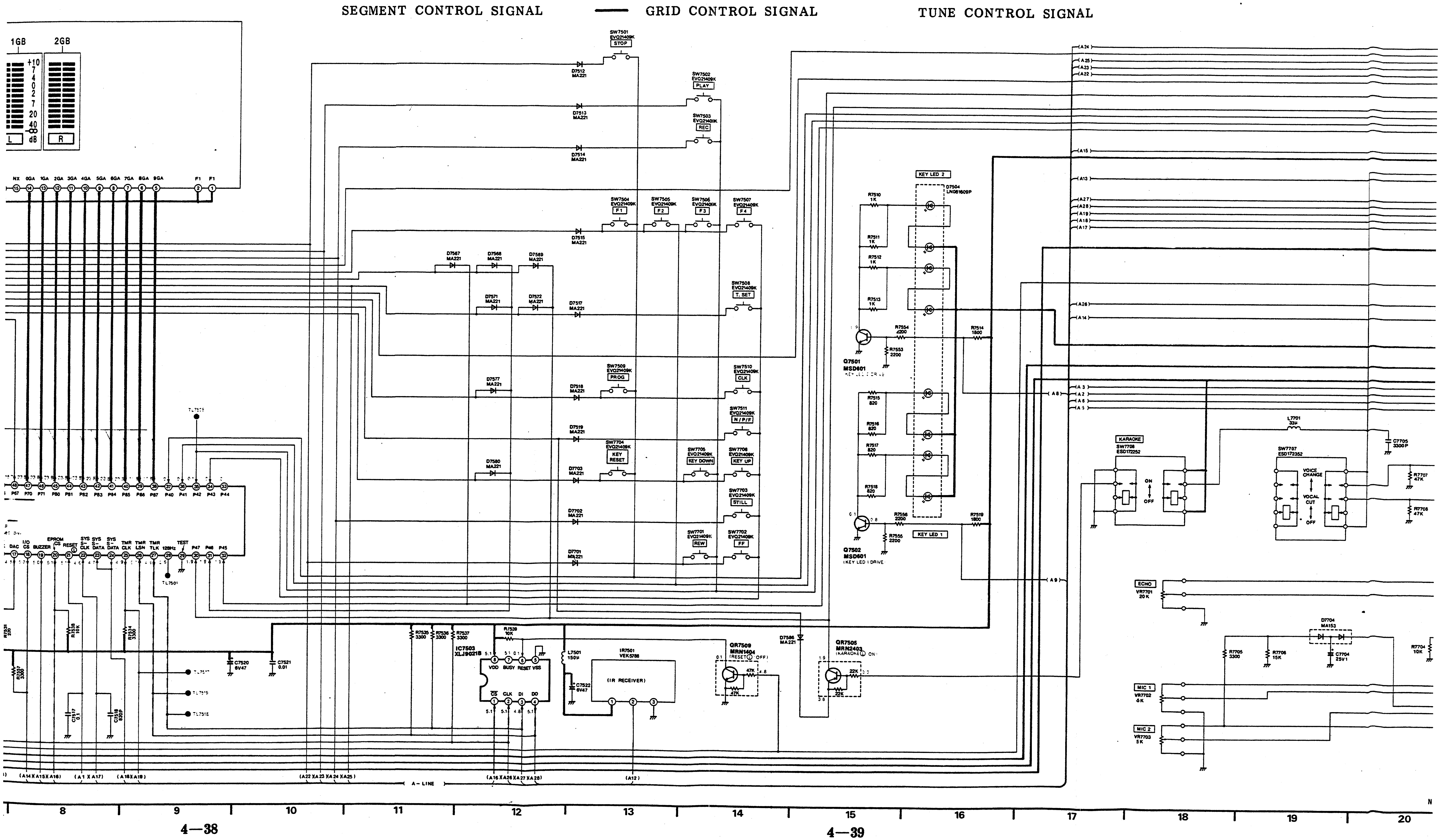
NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE WITH PAL COLOUR SIGNAL. (KARAOKE SW, ON)

NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

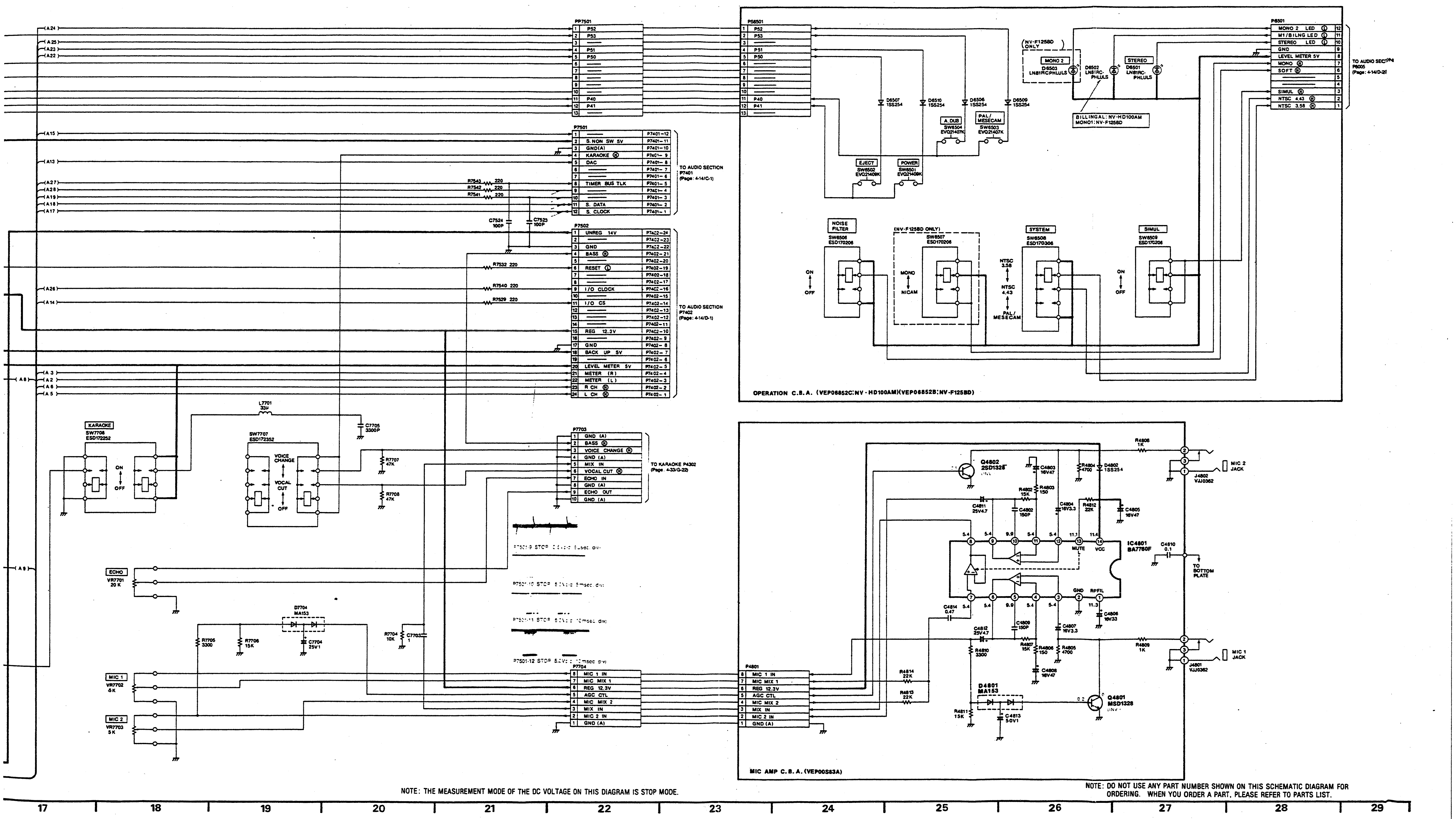
4-11. TIMER & OPERATION SCHEMATIC DIAGRAM



SEGMENT CONTROL SIGNAL
DP7501
VSL0276A,B
4G
5G
9G
1GB
2GB
VTR
CATV SP SLP
A.DUB
REC
INSERT REMAIN WRITE MESECAM PDC VPS
SU MO TU WE
TH FR SA PROG
R ON
S AP
COUNT
OFF
D AP
L
R
dB
8G
7G
6G
4G
3G
2G
1G
0G
T1701
ETE13K80AY
C1706
C1703
470P(500V)
Q1701
2SD973A
L1701
C1701
16V100
C1702
0.01
C1705
0.01
R1702
100
D1701
MA1270
R1701
3300
C1704
35V22
D1702
MA185
R1703
100
R7501
82
RX7503
EXBF8E104J
RX7502
EXBF8E104J
RX7501
EXBF8E104J
R7502
82
D7501
MA3075
R7522
100K
R7507
47K
C7503
C7502
6V33
D7502
MA221
R7503
22K
C7504
0.022
IC7505
BA6810S
R7504
1K
C7505
25V4.7
R7505
47K
R7506
47K
C7506
25V4.7
C7508
0.047
C7507
0.047
R7508
2700
QR7502
MRN2403
QR7501
MRN2403
IC7502
PST7026
IC7504
PST7043
OUTPUT CIRCUIT
POWER VOLTAGE DET
V1
V2
GND
R7549
10K
R7546
3300
R7520
100
C7509
50V22
IC7501
M37502V4BB
C7510
0.1
X7501
X7502
C7511
10P
C7513
27P
C7514
22P
R7524
330
R7525
10M
R7526
220K
QR7503
UN211D
R7527
R7529
22K
R7531
220
R7537
3300
R7538
10K
R7534
3300
C7519
220P
C7517
0.1
C7520
6V47
C7521
0.01
D7567
MA221
D7568
MA221
D7569
MA221
D7571
MA221
D7572
MA221
D7577
MA221
D7580
MA221
R7535
3300
R7536
3300
R7537
3300
R7539
10K
IC7503
XLJ8021B
VDD BUSY RESET VSS
CS CLK DI DO
TL7515
TL7501
TL7504
A- LINE
(A1)
(A2)
(A3)
(A4)
(A5XA6)
(A8XA9XA4)
(A12XA13)
(A14XA15XA16)
(A1 XA17)
(A18XA19)
(A22XA23XA24XA25)
(A16XA26XA27XA28)
1
2
3
4
5
6
7
8
9
10
11
12
A
B
C
D
E
F
G


SEGMENT CONTROL SIGNAL
GRID CONTROL SIGNAL
TUNE CONTROL SIGNAL
1GB
2GB
+10 7 4 0 2 7 20 40 -∞ dB
L
R
SW7501 EVQ21409K STOP
SW7502 EVQ21409K PLAY
SW7503 EVQ21409K REC
SW7504 EVQ21409K F1
SW7505 EVQ21409K F2
SW7506 EVQ21409K F3
SW7507 EVQ21409K F4
SW7508 EVQ21409K T. SET
SW7509 EVQ21409K PROG
SW7510 EVQ21409K CLK
SW7511 EVQ21409K N/P/F
SW7704 EVQ21409K KEY RESET
SW7705 EVQ21409K KEY DOWN
SW7706 EVQ21409K KEY UP
SW7703 EVQ21409K STILL
SW7701 EVQ21409K REW
SW7702 EVQ21409K FF
D7512 MA221
D7513 MA221
D7514 MA221
D7515 MA221
D7517 MA221
D7518 MA221
D7519 MA221
D7703 MA221
D7702 MA221
D7701 MA221
D7567 MA221
D7568 MA221
D7569 MA221
D7571 MA221
D7572 MA221
D7577 MA221
D7580 MA221
D7586 MA221
KEY LED 2
D7504 LN061609P
KEY LED 1
R7510 1K
R7511 1K
R7512 1K
R7513 1K
R7554 2200
R7553 2200
R7514 1800
Q7501 MSD601 KEY LED 2 DRIVE
R7515 820
R7516 820
R7517 820
R7518 820
R7556 2200
R7555 2200
R7519 1800
Q7502 MSD601 (KEY LED 1 DRIVE)
IC7503 XLJ9021B
VDD BUSY RESET VSS
CS CLK DI DO
R7535 3300
R7536 3300
R7537 3300
R7539 10K
L7501 150μ
C7522 6V47
IR7501 VEK5788
(IR RECEIVER)
QR7509 MRN1404 (RESET① OFF)
47K
QR7505 MRN2403 (KARAOKE① ON)
22K
C7520 6V47
C7521 0.01
C7517 0.1
C7518 820P
R7531
R7532 3300
R7538 10K
R7534 3300
TL7501
TL7517
TL7519
TL7518
NX 0GA 1GA 2GA 3GA 4GA 5GA 6GA 7GA 8GA 9GA F1 F1
P67 P70 P71 P80 P81 P82 P83 P84 P85 P86 P87 P40 P41 P42 P43 P44
DAC I/O CS BUZZER EPROM CS RESET SYS S-CLK SYS S-DATA SYS S-DATA TMR CLK TMR LSN TMR TLK 128Hz TEST P47 P46 P45
(A24) (A25) (A23) (A22) (A15) (A13) (A27) (A28) (A19) (A18) (A17) (A26) (A14) (A8) (A3) (A2) (A6) (A5) (A9)
(A14)(A15)(A16) (A1)(A17) (A18)(A19) (A22)(A23)(A24)(A25) A-LINE (A16)(A26)(A27)(A28) (A12)
KARAOKE SW7708 ESD172252
ON OFF
L7701 33μ
C7705 3300P
SW7707 ESD172352
VOICE CHANGE
VOCAL CUT
OFF
R7707 47K
R7708 47K
ECHO VR7701 20K
D7704 MA153
R7705 3300
R7706 15K
C7704 25V1
R7704 10K
MIC 1 VR7702 5K
MIC 2 VR7703 5K
8 9 10 11 12 13 14 15 16 17 18 19 20

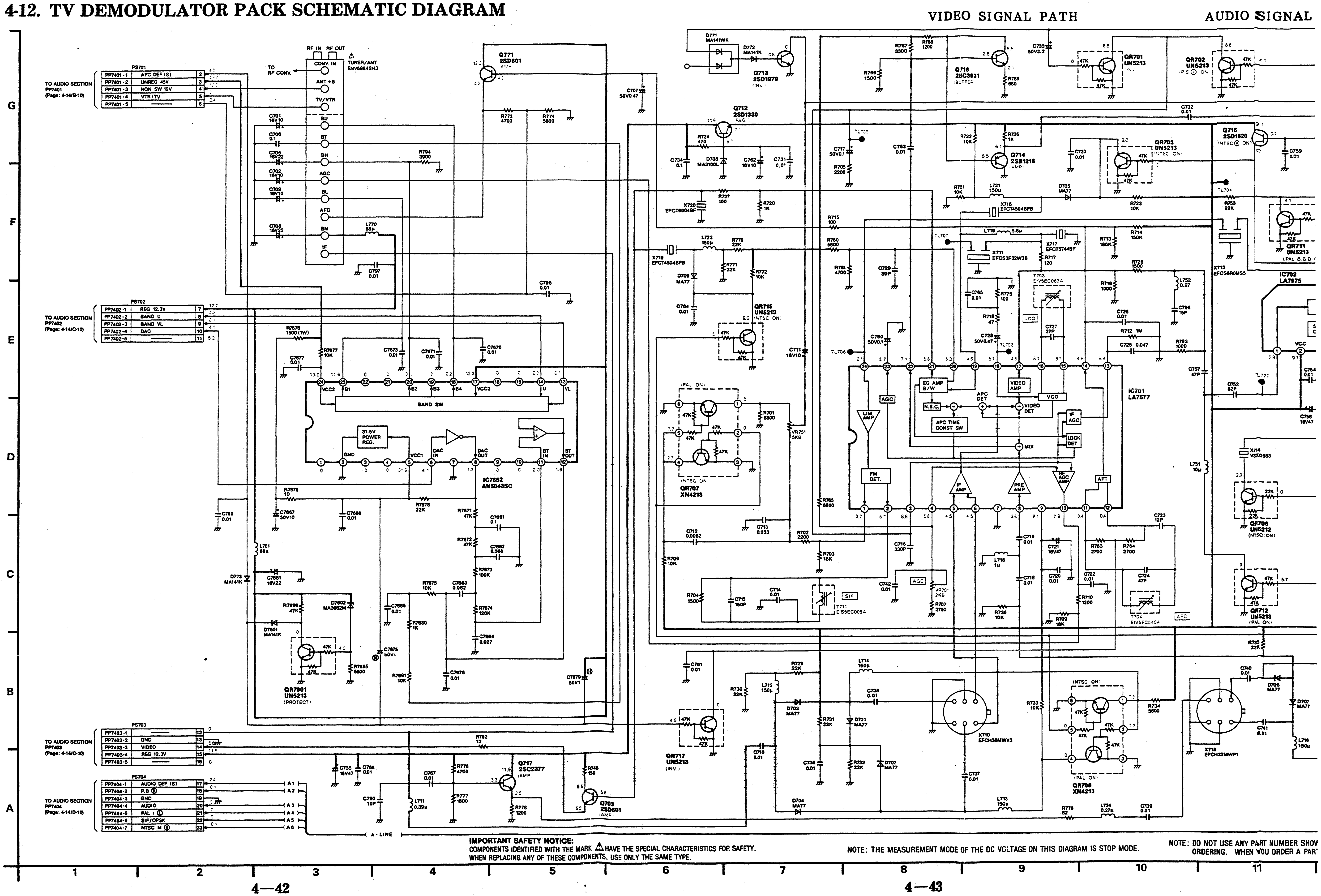
SIGNAL


PP7501
P7501
TO AUDIO SECTION P7401 (Page: 4-14/C-1)
P7502
TO AUDIO SECTION P7402 (Page: 4-14/D-1)
P7703
TO KARAOKE P4302 (Page: 4-33/G-22)
P7704
KARAOKE
SW7706 ESD172252
SW7707 ESD172352
VOICE CHANGE
VOCAL CUT
L7701
C7705 3300P
R7707 47K
R7708 47K
ECHO
VR7701 20K
MIC 1
VR7702 5K
MIC 2
VR7703 5K
D7704 MA153
R7705 3300
R7706 15K
C7704 25V1
R7704 10K
P7501-9 STOP 0.5V/div 5μsec/div
P7501-10 STOP 5.0V/div 5msec/div
P7501-11 STOP 5.0V/div 10msec/div
P7501-12 STOP 5.0V/div 10msec/div
PS6501
P6501
TO AUDIO SECTION P6005 (Page: 4-14/D-20)
MONO 2
STEREO
EJECT
POWER
A.DUB
PAL/MESECAM
NOISE FILTER
SYSTEM
SIMUL
BILLINGAL: NV-HD100AM
MONO1: NV-F125BD
(NV-F125BD ONLY)
OPERATION C.B.A. (VEP06852C:NV-HD100AM)(VEP06852B:NV-F125BD)
P4801
Q4802 2SD1328
Q4801 MSD1328
IC4801 BA7760F
D4801 MA153
MIC 2 JACK
J4802 VJJ0362
MIC 1 JACK
J4801 VJJ0362
TO BOTTOM PLATE
MIC AMP C.B.A. (VEP00S83A)
17
18
19
20
21
22
23
24
25
26
27
28
29

NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.

NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

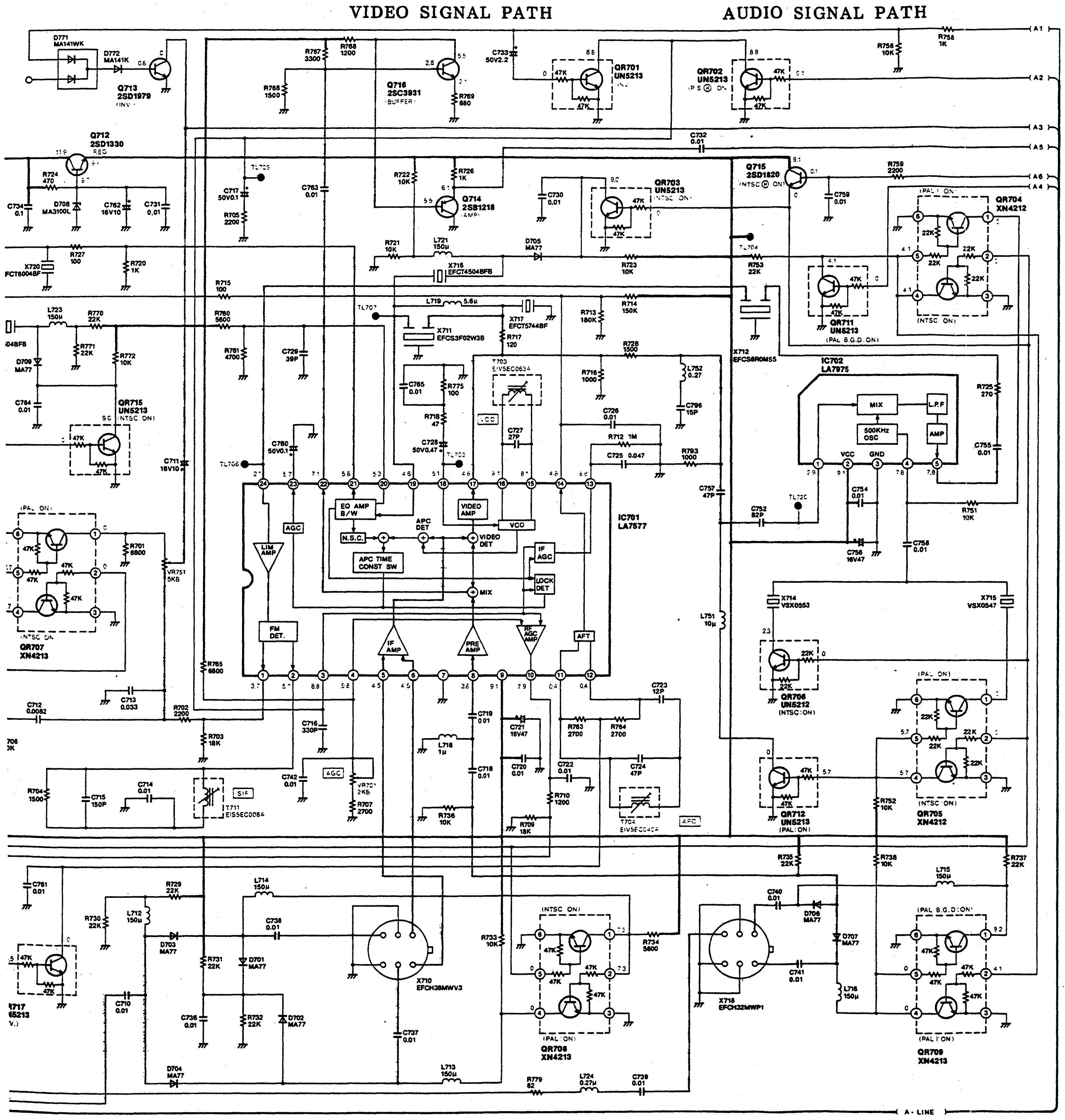
4-12. TV DEMODULATOR PACK SCHEMATIC DIAGRAM


VIDEO SIGNAL PATH
AUDIO SIGNAL
G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10
11
PS701
TO AUDIO SECTION PP7401 (Page: 4-14/B-10)
PP7401-1 AFC DEF (S)
PP7401-2 UNREG 45V
PP7401-3 NON SW 12V
PP7401-4 VTR/TV
PP7401-5
PS702
TO AUDIO SECTION PP7402 (Page: 4-14/C-10)
PP7402-1 REG 12.3V
PP7402-2 BAND U
PP7402-3 BAND VL
PP7402-4 DAC
PP7402-5
PS703
TO AUDIO SECTION PP7403 (Page: 4-14/C-10)
PP7403-1
PP7403-2 GND
PP7403-3 VIDEO
PP7403-4 REG 12.3V
PP7403-5
PS704
TO AUDIO SECTION PP7404 (Page: 4-14/D-10)
PP7404-1 AUDIO DEF (S)
PP7404-2 P.B Ⓗ
PP7404-3 GND
PP7404-4 AUDIO
PP7404-5 PAL I Ⓛ
PP7404-6 SIF/QPSK
PP7404-7 NTSC M Ⓗ
A1
A2
A3
A4
A5
A6
A-LINE
RF IN RF OUT
TUNER/ANT ENV59845H3
TO RF CONV.
CONV. IN
ANT +B
TV/VTR
BU
BT
BH
AGC
BL
AFC
BM
IF
Q771 2SD601 AMP
Q712 2SD1330 REG
Q713 2SD1979 INV.
Q716 2SC3931 BUFFER
Q714 2SB1218 AMP
Q715 2SD1820 NTSC Ⓗ ON
Q717 2SC2377 AMP
Q703 2SD601 AMP
QR701 UN5213
QR702 UN5213
QR703 UN5213
QR705 UN5213 NTSC ON
QR706 UN5212 (NTSC ON)
QR707 XN4213
QR708 XN4213
QR711 UN5213
QR712 UN5213 (PAL ON)
QR717 UN5213 (INV.)
QR7601 UN5213 (PROTECT)
IC7652 AN5043SC
VCC2
B1
B2
B3
B4
VCC3
U
VL
BAND SW
31.5V POWER REG.
GND
VCC1
DAC IN
DAC OUT
BT IN
BT OUT
IC701 LA7577
LIM AMP
AGC
EQ AMP B/W
N.S.C.
APC DET
APC TIME CONST SW
VIDEO AMP
VIDEO DET
VCO
IF AGC
LOCK DET
MIX
FM DET.
IF AMP
PRE AMP
RF AGC AMP
AFT
IC702 LA7975
X710 EFCH38MWV3
X718 EFCH32MWP1
X719 EFCT4504BFB
X720 EFCT6004BF
X716 EFCT4504BFB
X717 EFCT5744BF
X711 EFCS3F02W3B
X712 EFCS6R0MS5
X714 VSX0553
T703 EIV5EC063A
T704 EIV5EC040A
T711 EIS5EC006A
VR751 5KB
D771 MA141WK
D772 MA141K
D773 MA141K
D7601 MA141K
D7602 MA3082M
D708 MA3100L
D709 MA77
D705 MA77
D701 MA77
D702 MA77
D703 MA77
D704 MA77
D706 MA77
D707 MA77
L770 68μ
L701 68μ
L719 5.6μ
L721 150μ
L723 150μ
L714 150μ
L712 150μ
L713 150μ
L711 0.39μ
L718 1μ
L724 0.27μ
L751 10μ
L752 0.27
L716 150μ
R7676 1500 (1W)
R7677 10K
R7678 22K
R7679 10
R773 4700
R774 5600
R794 3900
R792 12
R776 4700
R777 1800
R778 1200
R748 150
R767 3300
R768 1200
R766 1500
R769 680
R724 470
R727 100
R720 1K
R715 100
R760 5600
R761 4700
R705 2200
R722 10K
R726 1K
R721 10K
R723 10K
R713 180K
R714 150K
R716 1000
R717 120
R718 47
R725 1500
R712 1M
R793 1000
R770 22K
R771 22K
R772 10K
R701 6800
R765 6800
R702 2200
R703 18K
R704 1500
R706 10K
R707 2700
R709 18K
R710 1200
R763 2700
R764 2700
R729 22K
R730 22K
R731 22K
R732 22K
R733 10K
R734 5600
R735 22K
R736 10K
R753 22K
R779 82
C707 50V0.47
C701 16V10
C706 0.1
C705 16V22
C702 16V10
C709 16V10
C708 16V22
C797 0.01
C798 0.01
C799 0.01
C733 50V2.2
C732 0.01
C759 0.01
C717 50V0.1
C763 0.01
C730 0.01
C734 0.1
C762 16V10
C731 0.01
C729 39P
C765 0.01
C727 27P
C728 50V0.47
C726 0.01
C725 0.047
C796 15P
C757 47P
C752 82P
C754 0.01
C756 16V47
C764 0.01
C760 50V0.1
C711 16V10
C712 0.0082
C713 0.033
C716 330P
C715 150P
C714 0.01
C742 0.01
C719 0.01
C718 0.01
C721 16V47
C720 0.01
C722 0.01
C723 12P
C724 47P
C761 0.01
C738 0.01
C710 0.01
C736 0.01
C737 0.01
C739 0.01
C740 0.01
C741 0.01
C735 16V47
C766 0.01
C767 0.01
C790 10P
C7667 50V10
C7666 0.01
C7670 0.01
C7671 0.01
C7673 0.01
C7677 0.01
C7661 0.1
C7662 0.068
C7663 0.082
C7664 0.027
C7665 0.01
C7675 50V1
C7676 0.01
C7679 50V1
C7681 16V22
R7671 47K
R7672 47K
R7673 100K
R7674 120K
R7675 10K
R7680 1K
R7691 10K
R7695 5600
R7696 47K
TL701
TL702
TL703
TL704
TL706
TL707
TL720
AGC
SIF
AFC
VCO

IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED WITH THE MARK ⚠ HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY.
WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SAME TYPE.

NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.

NOTE: DO NOT USE ANY PART NUMBER SHOV
ORDERING. WHEN YOU ORDER A PAR

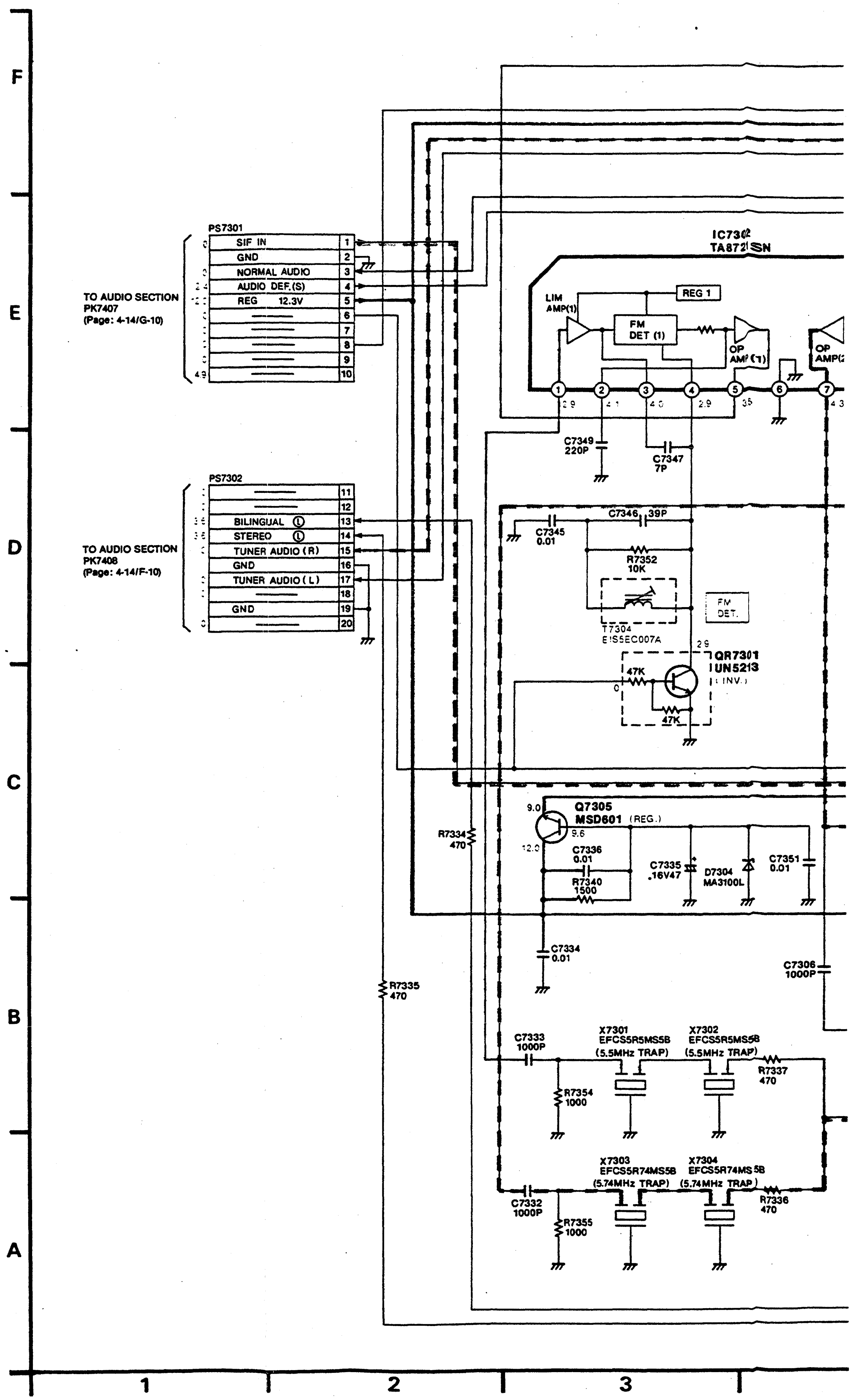

VIDEO SIGNAL PATH
AUDIO SIGNAL PATH
D771 MA141WK
D772 MA141K
Q713 2SD1979 (INV.)
Q712 2SD1330 REG
Q716 2SC3931 (BUFFER)
QR701 UN5213
QR702 UN5213
Q714 2SB1218 (AMP)
QR703 UN5213
Q715 2SD1820 (NTSC ON)
QR704 XN4212
QR711 UN5213 (PAL B.G.D. ON)
QR715 UN5213 (NTSC ON)
QR707 XN4213
IC701 LA7577
IC702 LA7975
EQ AMP B/W
APC DET
VIDEO AMP
VCO
N.S.C.
VIDEO DET
APC TIME CONST SW
IF AGC
LOCK DET
MIX
AGC
LIM AMP
FM DET.
IF AMP
PRE AMP
RF AGC AMP
AFT
500KHz OSC
L.P.F
AMP
VCC
GND
X711 EFCS3F02W38
X712 EFCS6R0MS5
X714 VSX0553
X715 VSX0547
X716 EFCT4504BFB
X717 EFCT5744BF
X710 EFCH38MWV3
X718 EFCH32MWP1
X720 FCT6004BF
T703 EIV5EC063A
T704 EIV5EC040A
T711 EIS5EC006A
QR706 UN5212 (NTSC ON)
QR712 UN5213 (PAL ON)
QR705 XN4212
QR708 XN4213
QR709 XN4213
R717 UN5213 (INV.)
SIF
AGC
AFC
A1
A2
A3
A5
A6
A4
A-LINE
7
8
9
10
11
12

RACTERISTICS FOR SAFETY.
TYPE.

NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.

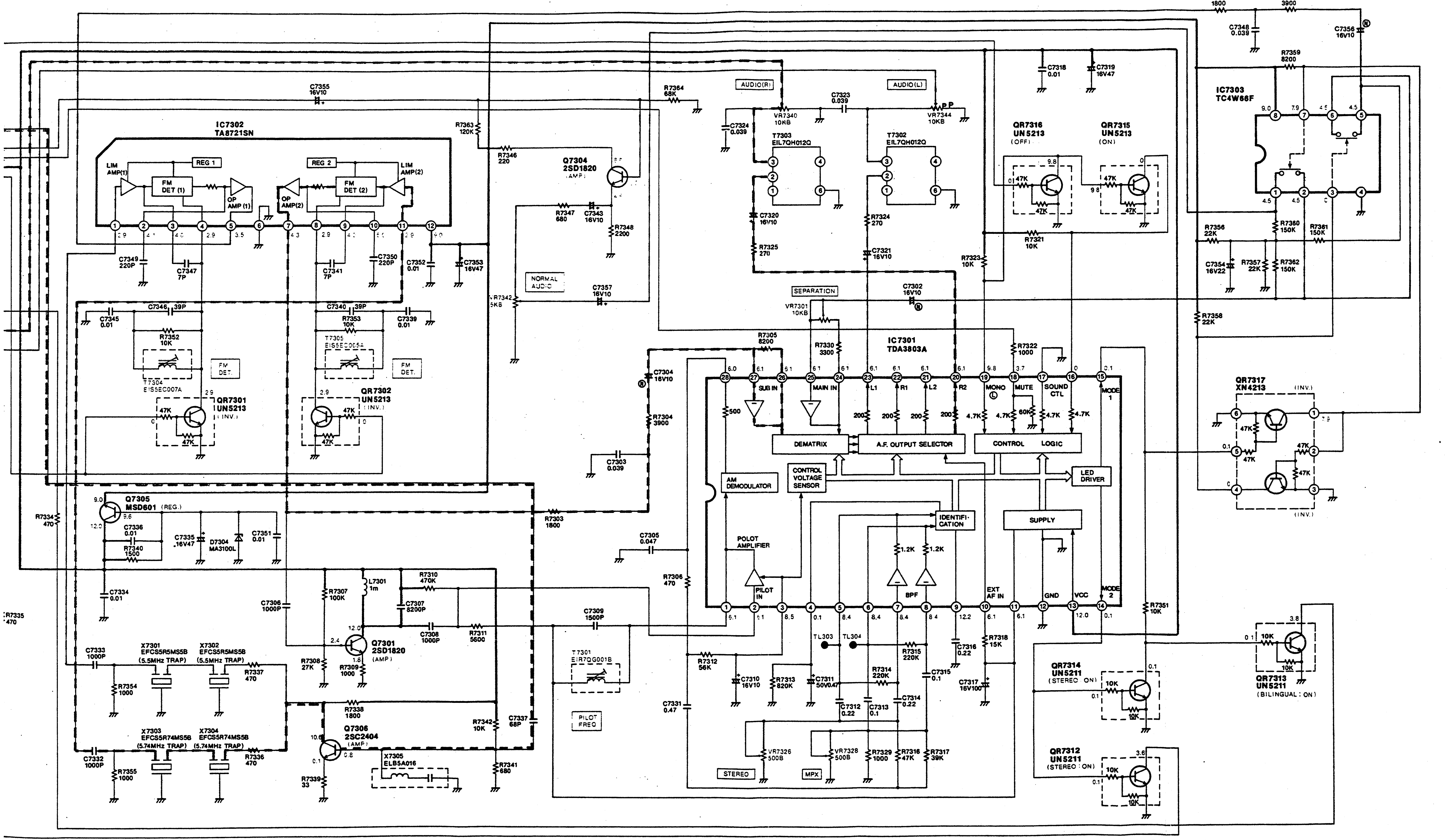
NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

4-13. MULTI DECODER PACK SCHEMATIC DIAGRAM (N


F
E
D
C
B
A
1
2
3
PS7301
SIF IN
GND
NORMAL AUDIO
AUDIO DEF.(S)
REG 12.3V
TO AUDIO SECTION PK7407 (Page: 4-14/G-10)
PS7302
BILINGUAL
STEREO
TUNER AUDIO (R)
GND
TUNER AUDIO (L)
GND
TO AUDIO SECTION PK7406 (Page: 4-14/F-10)
IC7302 TA8721SN
REG 1
LIM AMP(1)
FM DET (1)
OP AMP(1)
OP AMP(2)
FM DET.
T7304 EIS5EC007A
QR7301 UN5213 (INV.)
Q7305 MSD601 (REG.)
D7304 MA3100L
X7301 EFCS5R5MS5B (5.5MHz TRAP)
X7302 EFCS5R5MS5B (5.5MHz TRAP)
X7303 EFCS5R74MS5B (5.74MHz TRAP)
X7304 EFCS5R74MS5B (5.74MHz TRAP)

CK SCHEMATIC DIAGRAM (NV-HD100AM)

AUDIO MAIN SIGNAL PATH --- AUDIO SUB SIGNAL PATH

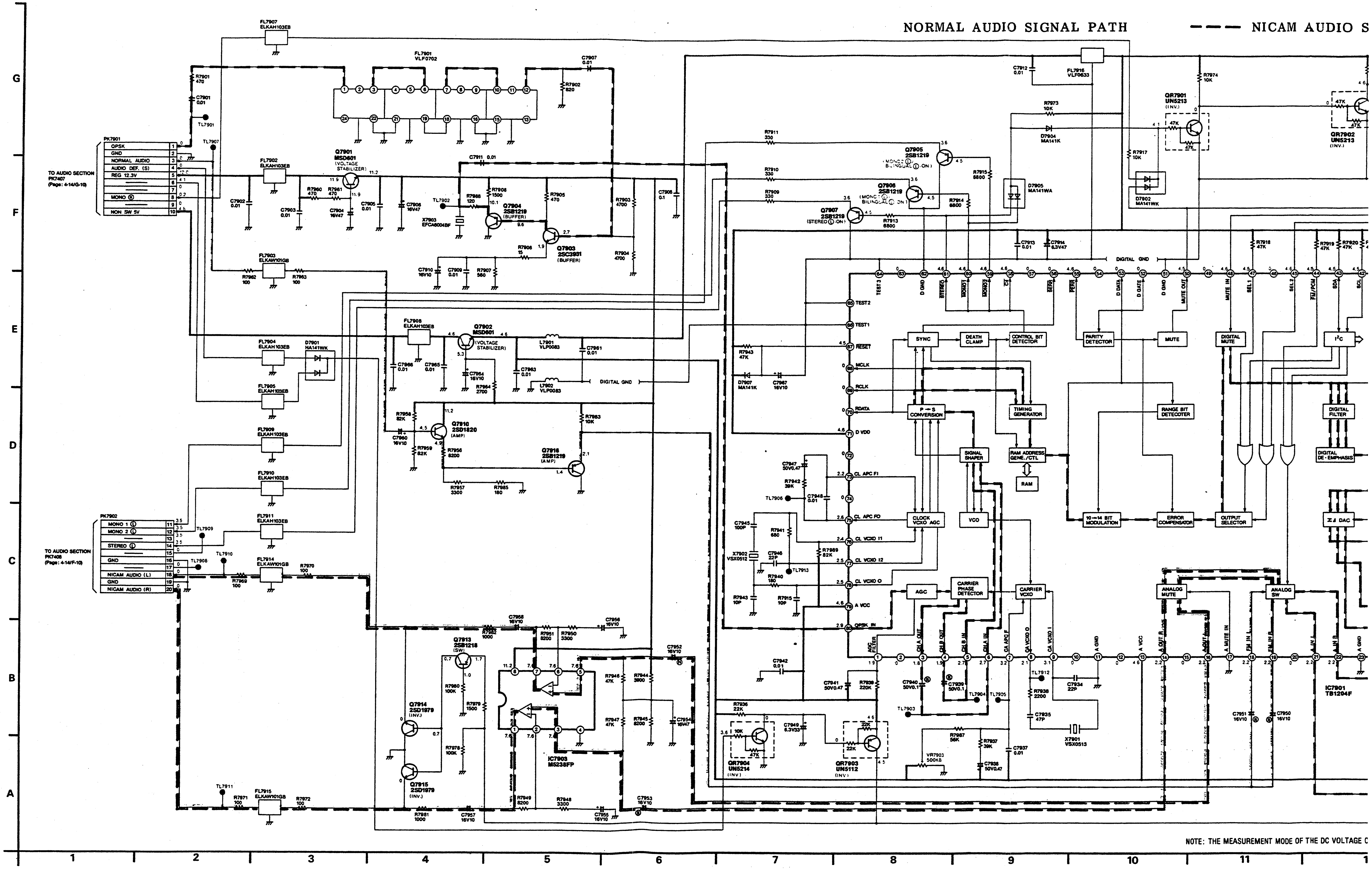


IC7302
TA8721SN
LIM AMP(1)
FM DET (1)
OP AMP (1)
REG 1
REG 2
OP AMP(2)
FM DET (2)
LIM AMP(2)
C7349 220P
C7347 7P
C7341 7P
C7350 220P
C7352 0.01
C7353 16V47
C7355 16V10
C7346 39P
C7345 0.01
R7352 10K
T7304 EISSEC007A
FM DET.
QR7301 UN5213 (INV.)
47K
C7340 39P
R7353 10K
C7339 0.01
T7305 EISSEC005A
QR7302 UN5213 (INV.)
R7363 120K
R7346 220
R7364 68K
Q7304 2SD1820 (AMP)
R7347 680
C7343 16V10
R7348 2200
NORMAL AUDIO
R7342 5K6
C7357 16V10
C7303 0.039
R7303 1800
R7334 470
Q7305 MSD601 (REG.)
C7336 0.01
R7340 1500
C7335 16V47
D7304 MA3100L
C7351 0.01
C7334 0.01
R7335 470
C7306 1000P
R7307 100K
L7301 1m
R7310 470K
C7307 8200P
C7308 1000P
R7311 5600
Q7301 2SD1820 (AMP)
R7308 27K
R7309 1000
C7333 1000P
X7301 EFCS5R5MS5B (5.5MHz TRAP)
X7302 EFCS5R5MS5B (5.5MHz TRAP)
R7337 470
R7354 1000
X7303 EFCS5R74MS5B (5.74MHz TRAP)
X7304 EFCS5R74MS5B (5.74MHz TRAP)
R7336 470
C7332 1000P
R7355 1000
R7338 1800
Q7306 2SC2404 (AMP)
X7305 ELBSA016
R7339 33
R7342 10K
C7337 68P
R7341 680
AUDIO(R)
AUDIO(L)
C7324 0.039
VR7340 10KB
C7323 0.039
VR7344 10KB
T7303 EIL7QH012Q
T7302 EIL7QH012Q
C7320 16V10
R7325 270
R7324 270
C7321 16V10
SEPARATION
VR7301 10KB
C7302 16V10
R7305 8200
R7330 3300
IC7301 TDA3803A
C7304 16V10
R7304 3900
SUB IN
MAIN IN
L1
R1
L2
R2
MONO
MUTE
SOUND CTL
MODE 1
DEMATRIX
A.F. OUTPUT SELECTOR
CONTROL LOGIC
AM DEMODULATOR
CONTROL VOLTAGE SENSOR
LED DRIVER
IDENTIFI-CATION
SUPPLY
POLOT AMPLIFIER
PILOT IN
BPF
EXT AF IN
GND
VCC
MODE 2
C7305 0.047
R7306 470
C7309 1500P
T7301 EIR7QG001B
PILOT FREQ
R7312 56K
C7310 16V10
R7313 820K
C7311 50V0.47
C7312 0.22
C7313 0.1
R7314 220K
R7315 220K
C7314 0.22
C7315 0.1
C7316 0.22
R7318 15K
C7317 16V100
C7331 0.47
TL303
TL304
VR7326 500B
VR7328 500B
R7329 1000
R7316 47K
R7317 39K
STEREO
MPX
R7322 1000
R7323 10K
C7318 0.01
C7319 16V47
QR7316 UN5213 (OFF)
QR7315 UN5213 (ON)
R7321 10K
R7345 1800
R7302 3900
C7348 0.039
C7356 16V10
R7359 8200
IC7303 TC4W66F
R7356 22K
R7360 150K
R7361 150K
C7354 16V22
R7357 22K
R7362 150K
R7358 22K
QR7317 XN4213 (INV.)
R7351 10K
QR7314 UN5211 (STEREO : ON)
QR7312 UN5211 (STEREO : ON)
QR7313 UN5211 (BILINGUAL : ON)

NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.

NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

4-14. NICAM DECODER PACK SCHEMATIC DIAGRAM (NV-F125BD)

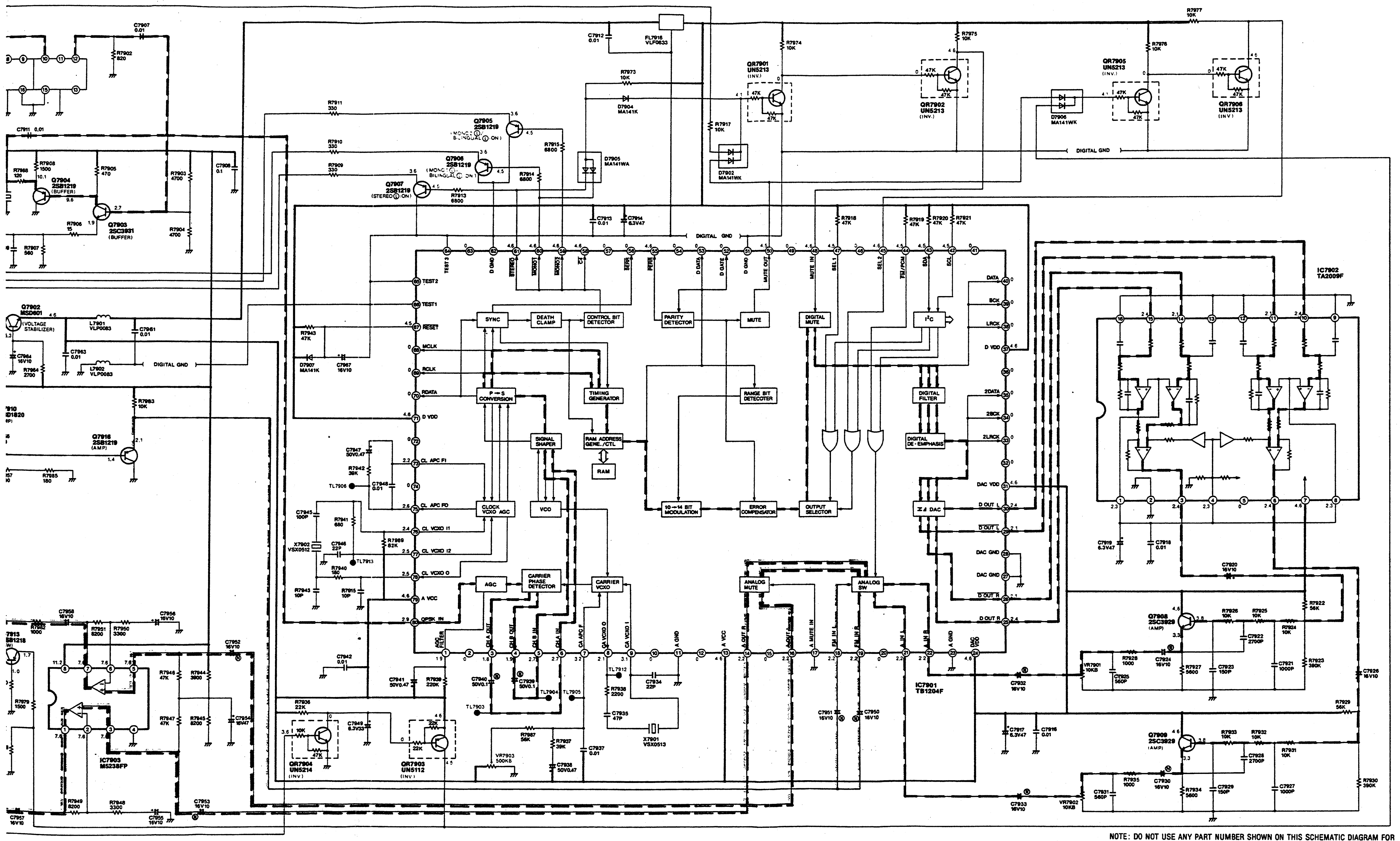


NORMAL AUDIO SIGNAL PATH
NICAM AUDIO S
G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10
11
PK7901
QPSK
GND
NORMAL AUDIO
AUDIO DEF. (S)
REG 12.3V
MONO Ⓡ
NON SW 5V
TO AUDIO SECTION PK7407 (Page: 4-14/G-10)
PK7902
MONO 1 Ⓛ
MONO 2 Ⓛ
STEREO Ⓛ
GND
NICAM AUDIO (L)
GND
NICAM AUDIO (R)
TO AUDIO SECTION PK7408 (Page: 4-14/F-10)
FL7907 ELKAH103EB
FL7901 VLF0702
FL7902 ELKAH103EB
FL7903 ELKAW101GB
FL7904 ELKAH103EB
FL7905 ELKAH103EB
FL7909 ELKAH103EB
FL7910 ELKAH103EB
FL7911 ELKAH103EB
FL7914 ELKAW101GB
FL7915 ELKAW101GB
FL7908 ELKAH103EB
FL7916 VLF0633
Q7901 MSD601 (VOLTAGE STABILIZER)
Q7902 MSD601 (VOLTAGE STABILIZER)
Q7903 2SC3931 (BUFFER)
Q7904 2SB1219 (BUFFER)
Q7905 2SB1219
Q7906 2SB1219
Q7907 2SB1219 (STEREO Ⓛ:ON)
Q7910 2SD1820 (AMP)
Q7916 2SB1219 (AMP)
Q7913 2SB1218 (SW)
Q7914 2SD1979 (INV.)
Q7915 2SD1979 (INV.)
QR7901 UN5213 (INV.)
QR7902 UN5213 (INV.)
QR7903 UN5112 (INV.)
QR7904 UN5214 (INV.)
D7901 HA141WK
D7902 MA141WK
D7904 MA141K
D7905 MA141WA
D7907 MA141K
X7902 VSX0512
X7903 EFCA6004BF
X7901 VSX0513
L7901 VLP0083
L7902 VLP0083
IC7903 M5238FP
IC7901 TB1204F
DIGITAL GND
TEST2
TEST1
RESET
MCLK
RCLK
RDATA
D VDD
CL APC FI
CL APC FO
CL VCXO I1
CL VCXO I2
CL VCXO O
A VCC
QPSK IN
TEST3
D GND
STEREO
MONO1
MONO2
CT
SEPA
PERR
D DATA
D GATE
MUTE OUT
MUTE IN
SEL1
SEL2
FM/PCM
SDA
SCL
AGC FILTER
CH A OUT
CH B OUT
CH B IN
CH A IN
CA APC F
CA VCXO O
CA VCXO I
A GND
A OUT R
A OUT L
A MUTE IN
FM IN L
FM IN R
A IN R
SYNC
DEATH CLAMP
CONTROL BIT DETECTOR
PARITY DETECTOR
MUTE
DIGITAL MUTE
I²C
P→S CONVERSION
TIMING GENERATOR
RANGE BIT DETECTOR
DIGITAL FILTER
SIGNAL SHAPER
RAM ADDRESS GENE./CTL
RAM
DIGITAL DE-EMPHASIS
CLOCK VCXO AGC
VCO
10→14 BIT MODULATION
ERROR COMPENSATOR
OUTPUT SELECTOR
ΣΔ DAC
AGC
CARRIER PHASE DETECTOR
CARRIER VCXO
ANALOG MUTE
ANALOG SW
VR7903 500KB

NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE C

RAM (NV-F125BD)

NORMAL AUDIO SIGNAL PATH ‒ ‒ ‒ NICAM AUDIO SIGNAL PATH


IC7901
TB1204F
IC7902
TA2009F
IC7903
M5238FP
Q7902
MSD601
(VOLTAGE STABILIZER)
Q7903
2SC3931
(BUFFER)
Q7904
2SB1219
(BUFFER)
Q7905
2SB1219
Q7906
2SB1219
Q7907
2SB1219
(STEREO ① ON)
Q7908
2SC3929
(AMP)
Q7909
2SC3929
(AMP)
Q7916
2SB1219
(AMP)
QR7901
UN5213
(INV.)
QR7902
UN5213
(INV.)
QR7903
UN5112
(INV.)
QR7904
UN5214
(INV.)
QR7905
UN5213
(INV.)
QR7906
UN5213
(INV.)
D7902
MA141WK
D7904
MA141K
D7905
MA141WA
D7906
MA141WK
D7907
MA141K
FL7916
VLF0633
L7901
VLP0083
L7902
VLP0083
X7901
VSX0513
X7902
VSX0512
VR7901
10KB
VR7902
10KB
VR7903
500KB
DIGITAL GND
SYNC
DEATH CLAMP
CONTROL BIT DETECTOR
PARITY DETECTOR
MUTE
DIGITAL MUTE
I²C
P→S CONVERSION
TIMING GENERATOR
RANGE BIT DETECTOR
DIGITAL FILTER
SIGNAL SHAPER
RAM ADDRESS GENE./CTL
RAM
DIGITAL DE-EMPHASIS
CLOCK VCXO AGC
VCO
10→14 BIT MODULATION
ERROR COMPENSATOR
OUTPUT SELECTOR
ΣΔ DAC
AGC
CARRIER PHASE DETECTOR
CARRIER VCXO
ANALOG MUTE
ANALOG SW
TEST 3
D GND
STEREO
MONO1
MONO2
I/2
BEPR
PEPR
D DATA
D GATE
MUTE OUT
MUTE IN
SEL 1
SEL 2
FM/PCM
SDA
SCL
TEST2
TEST1
RESET
MCLK
RCLK
RDATA
D VDD
CL APC FI
CL APC FO
CL VCXO I1
CL VCXO I2
CL VCXO O
A VCC
QPSK IN
DATA
BCK
LRCK
2DATA
2BCK
2LRCK
DAC VDD
D OUT L
DAC GND
D OUT R
AGC FILTER
CH A OUT
CH B OUT
CH B IN
CH A IN
CA APC F
CA VCXO O
CA VCXO I
A GND
A VCC
A OUT R
A OUT L
A MUTE IN
FM IN L
FM IN R
A IN L
A IN R
DAC VDD
(MONO ① / BILINGUAL ① ON)
(MONO ① / BILINGUAL ② ON)
TL7903
TL7904
TL7905
TL7906
TL7912
TL7913
5
6
7
8
9
10
11
12
13
14
15

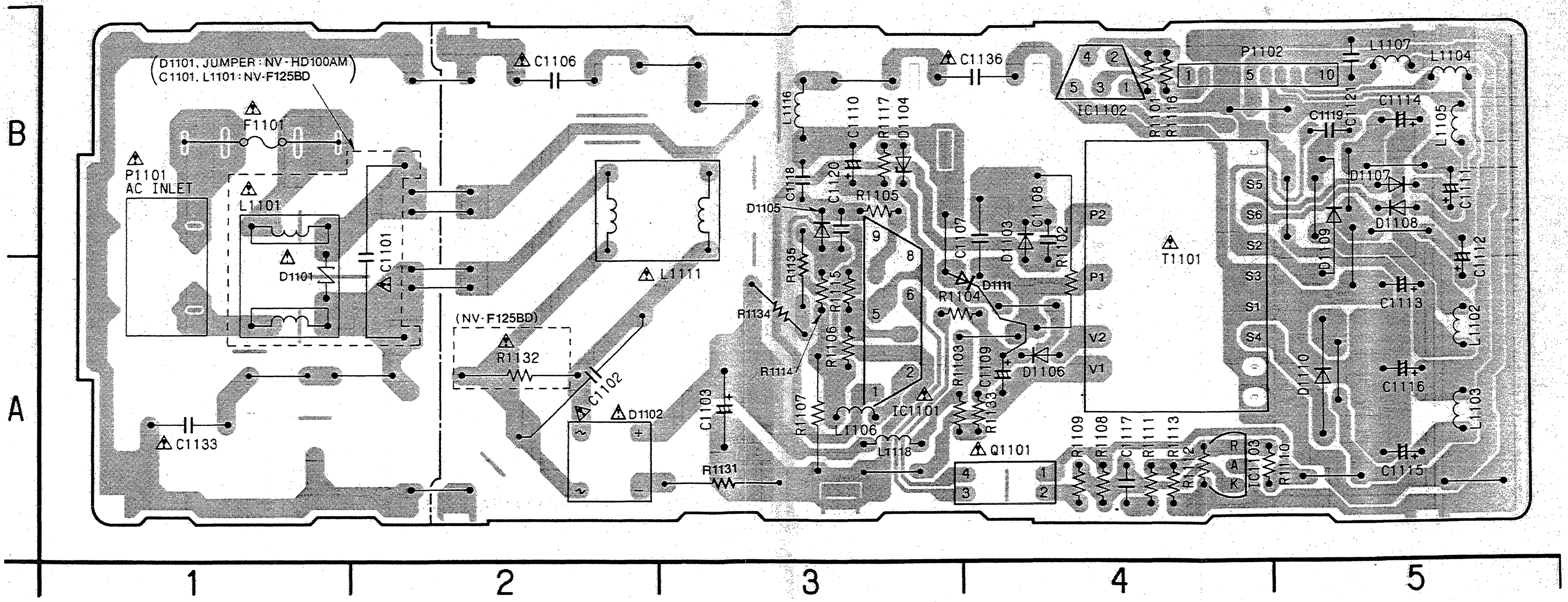
NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.

NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST

4-15. POWER C.B.A. (VEP01487Q: NV-HD100AM) (VEP01487P: NV-F125BD)

POWER C.B.A.	
Transistor	
Q1101	A-4
Integrated Circuit	
IC1101 IC1102 IC1103	A-3 B-4 A-4
Connector	
P1101 P1102	B-1 B-4

ADDRESS INFORMATION



B
A
1
2
3
4
5
(D1101, JUMPER : NV-HD100AM)
(C1101, L1101 : NV-F125BD)
F1101
P1101
AC INLET
L1101
D1101
C1101
C1106
L1111
(NV-F125BD)
R1132
C1102
D1102
C1133
C1136
L1116
C1110
R1117
D1104
C1118
C1120
R1105
D1105
R1135
R1115
R1134
R1106
R1114
R1107
L1106
L1118
IC1101
C1103
R1131
C1107
D1103
C1108
R1102
D1111
R1104
R1103
C1109
R1133
D1106
Q1101
IC1102
R1101
R1116
P1102
1
5
10
L1107
L1104
C1119
C1121
C1114
L1105
P2
P1
V2
V1
S5
S6
S2
S3
S1
S4
T1101
D1107
D1108
D1109
C1111
C1112
C1113
L1102
D1110
C1116
L1103
C1115
R1109
R1108
C1117
R1111
R1113
R1112
R
A
K
IC1103
R1110

MAIN C.B.A. ADDRESS INFORMATION

SYSTEM CONTROL & SERVO Section	
Transistor	
Q1501	A-7
Q1502	A-1
Q1503	E-6
Q2001	D-12
Q6001	F-10
Q6002	E-11
Q6003	E-10
Q6004	C-16
Q6005	D-12
Q6006	D-12
Transistor & Resistor	
QR2001	D-9
QR2002	E-12
QR6002	C-9
QR6003	C-11
QR6004	E-12
QR6005	C-9
QR6010	D-12
QR6011	D-16
Integrated Circuit	
IC1501	C-4
IC1502	C-3
IC2001	F-8
IC2002	E-13
IC2003	B-13
IC2005	D-14
IC2901	F-1
IC6001	C-10
IC6009	D-14
Test Point	
TP2001	C-12
TP2002	D-9
TP2009	E-11
TP2015	D-14
TP2026	B-12
TP2031	D-9
TP2032	D-9
TP6010	D-11
TP6011	D-12
Adjustment	
VR2001	D-13
VR2006	E-13
VR2011	E-13
VR2018	E-13
VR2019	E-14
Connector	
P1503	B-5
P1504	A-6
P1505	B-7
P1506	E-6
P2001	C-13
P2002	C-13
P2003	C-14
P2901	E-2
P2902	E-2
P6001	F-10
P6002	G-14

ADDRESS INFORMATION

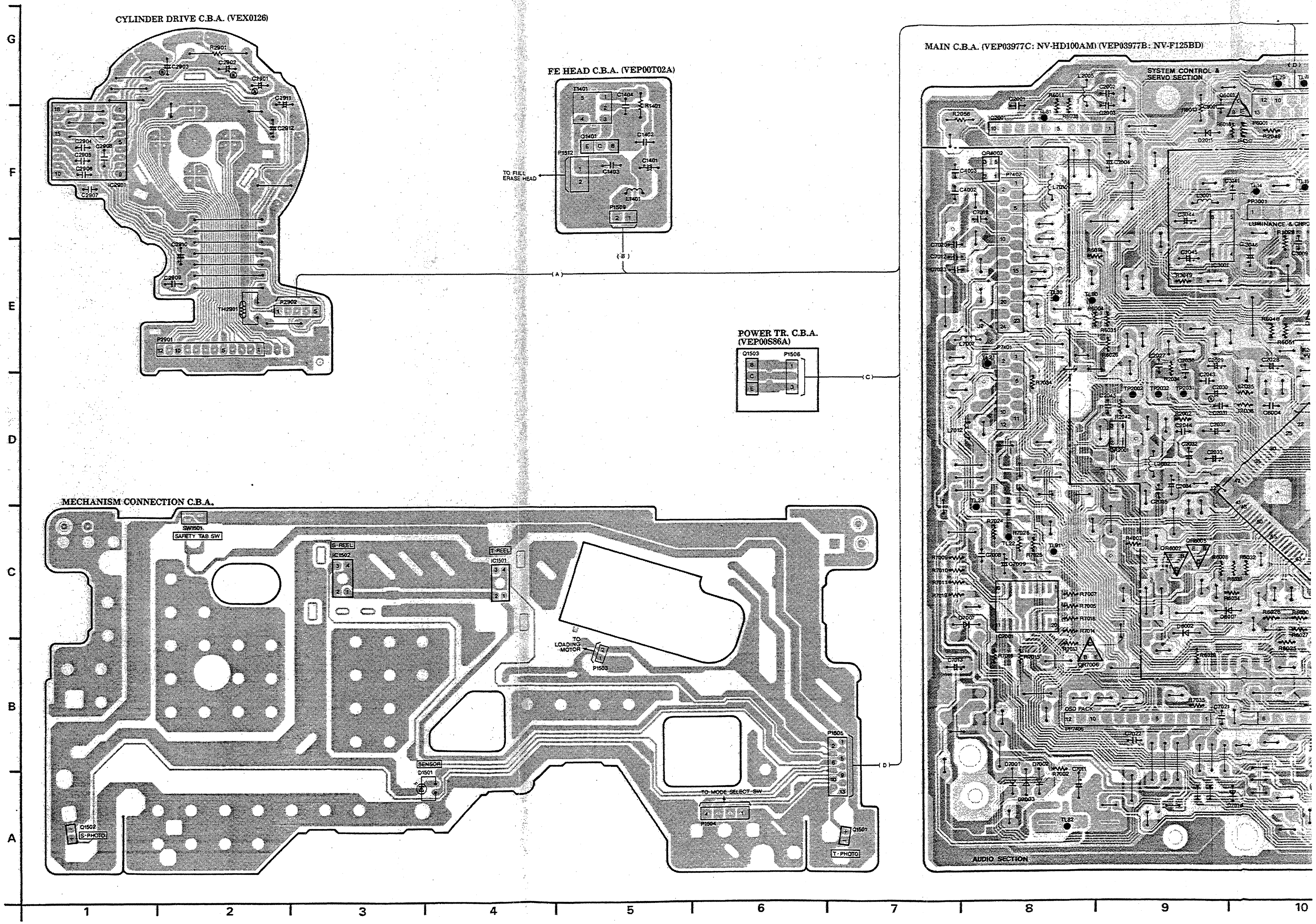
LUMINANCE & CHROMINANCE Section	
Transistor	
Q3001	F-13
Q3002	F-13
Q3003	F-13
Q3004	F-13
Q3006	F-13
Q3007	F-12
Q3009	E-12
Q3010	F-13
Q8001	E-14
Transistor & Resistor	
QR3001	D-15
QR3002	G-11
QR3005	E-17
QR3006	G-13
QR3007	F-12
Integrated Circuit	
IC3001	E-9
Test Point	
TP3001	F-14
TP3082	E-17
Adjustment	
VR3001	E-10
VR3012	F-11
VR3013	F-11
VR8001	E-14
Connector	
P3001	E-16
PP3001	F-10
PP3002	F-11
PP3003	F-14

ADDRESS INFORMATION

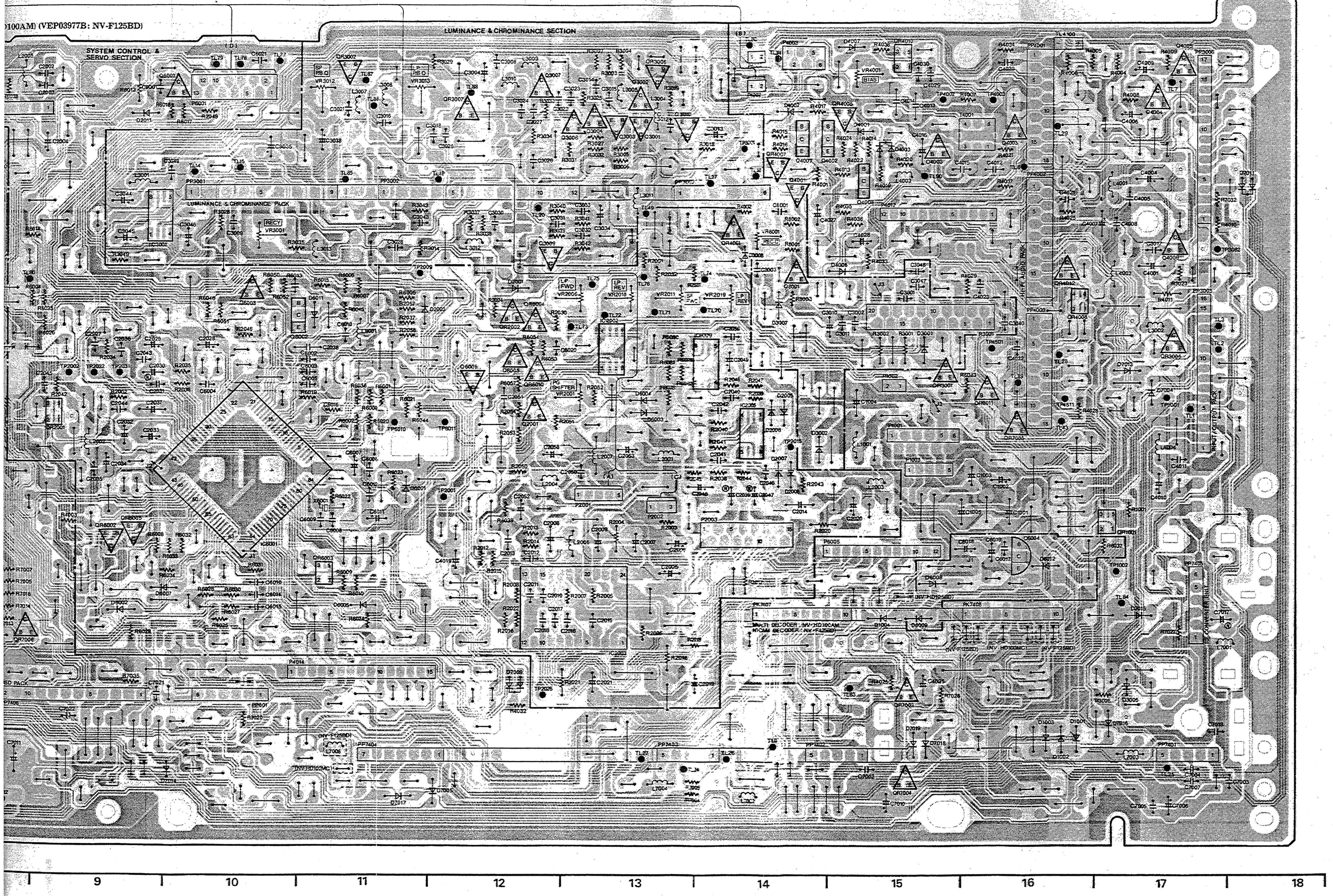
AUDIO Section	
Transistor	
Q1401	F-5
Q4001	F-14
Q4002	F-15
Q4003	F-15
Q4004	F-17
Q4005	G-17
Q4006	E-17
Q4007	F-14
Q4008	F-15
Q4009	F-16
Transistor & Resistor	
QR1001	C-17
QR4001	E-14
QR4002	F-8
QR4005	F-15
QR4007	F-14
QR4008	E-16
QR4010	G-15
QR4012	E-16
QR7003	B-15
QR7004	A-15
QR7005	D-16
QR7006	B-8
Integrated Circuit	
IC7001	C-8
Test Point	
TP1001	D-17
TP1002	C-17
TP4002	F-15
TP4003	F-16
TP4501	E-16
TP4511	D-16
Adjustment	
VR4001	G-15
Connector	
P1001	D-15
P1002	D-15
P1003	D-15
P1509	F-5
P1512	F-5
P4002	F-14
P4003	G-14
P4012	F-15
P4014	B-11
P6005	C-15
P7401	E-8
P7402	F-8
PK7407	C-14
PK7408	C-16
PP601	B-10
PP3005	E-17
PP3006	G-17
PP4001	G-16
PP4002	F-16
PP4003	E-16
PP7401	A-17
PP7402	A-14
PP7403	A-13
PP7404	A-11
PP7405	C-17
PP7406	B-8

ADDRESS INFORMATION

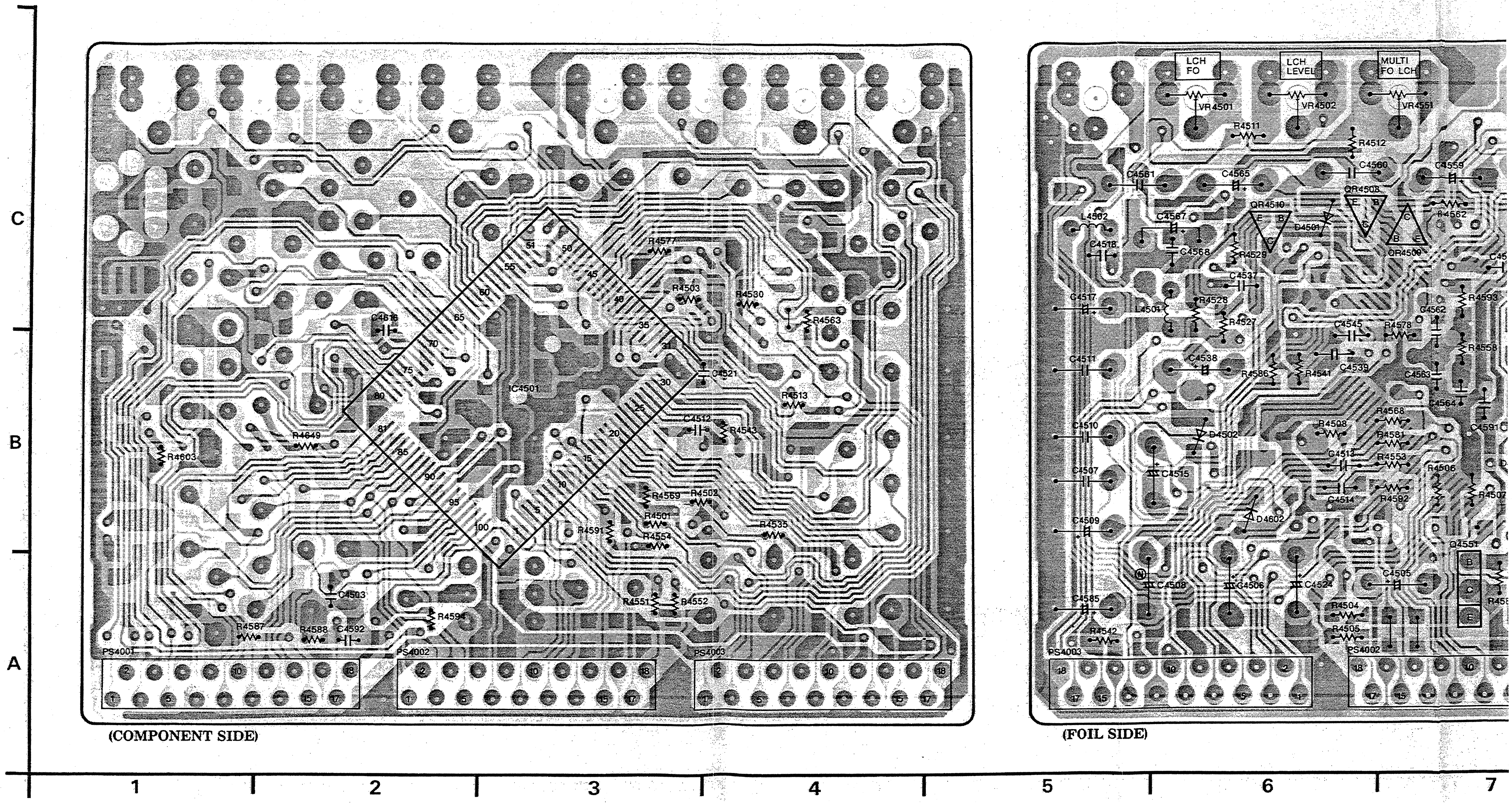
4-16. MAIN C.B.A. (VEP03977C: NV-HD100AM) (VEP03977B: NV-F125BD)


CYLINDER DRIVE C.B.A. (VEX0126)
R2901
C2903
C2902
C2901
C2911
C2912
C2904
C2905
C2906
C2908
C2907
IC2901
C2910
C2909
TH2901
P2902
P2901
FE HEAD C.B.A. (VEP00T02A)
T1401
C1404
R1401
Q1401
C1402
P1312
C1403
C1401
TO FULL ERASE HEAD
L1401
P1509
(A)
(B)
POWER TR. C.B.A. (VEP00S86A)
Q1503
P1506
(C)
MECHANISM CONNECTION C.B.A.
SW1501
SAFETY TAB SW
S-REEL
IC1502
T-REEL
IC1501
TO LOADING MOTOR
P1503
SENSOR
D1501
P1505
(D)
TO MODE SELECT SW
P1504
Q1502
S-PHOTO
Q1501
T-PHOTO
MAIN C.B.A. (VEP03977C: NV-HD100AM) (VEP03977B: NV-F125BD)
SYSTEM CONTROL & SERVO SECTION
LUMINANCE & CHROMA
OSD PACK
AUDIO SECTION
G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10

)100AM) (VEP03977B: NV-F125BD)


SYSTEM CONTROL & SERVO SECTION
LUMINANCE & CHROMINANCE SECTION
LUMINANCE & CHROMINANCE PACK
(D)
(B)
BIAS
RECV
RECC
LP FWD
LP REV
SP FAC
PG SHIFTER
MULTI DECODER : NV-HD100AM
NICAM DECODER : NV-F125BD
(NV-F125BD)
(NV-HD100MC)
IC2002
IC2003
IC6001
QR3007
QR4001
QR6002
QR6005
QR7004
QR7006
QR3005
P4014
PP3001
PP3002
PP7404
PP3403
PP7402
PP7401
9
10
11
12
13
14
15
16
17
18

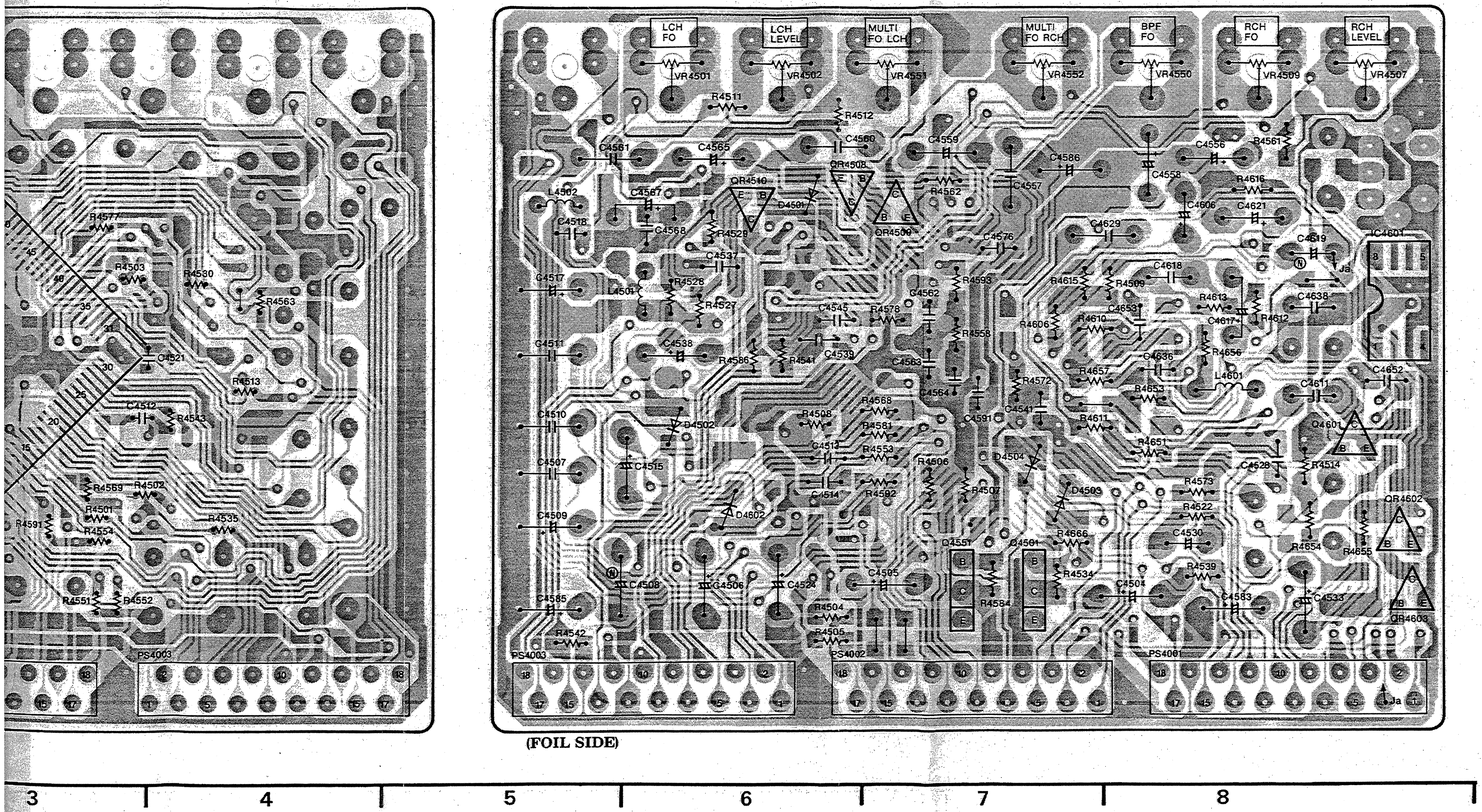
4-22. Hi-Fi AUDIO PACK C.B.A. (VEP04361K)



(COMPONENT SIDE)

(FOIL SIDE)

C
B
A
1
2
3
4
5
6
7
IC4501
R4577
R4503
R4530
R4563
C4616
C4521
R4513
C4512
R4543
R4649
R4603
R4569
R4502
R4501
R4591
R4554
R4535
C4503
R4594
R4551
R4552
R4587
R4588
C4592
PS4001
PS4002
PS4003
LCH FO
LCH LEVEL
MULTI FO LCH
VR4501
VR4502
VR4551
R4511
R4512
C4561
C4565
C4560
C4559
QR4508
QR4510
D4501
QR4509
R4562
L4502
C4567
C4518
C4568
R4529
C4537
C4517
L4501
R4528
R4527
C4545
R4578
R4593
C4562
R4558
C4511
C4538
R4586
R4541
C4539
C4563
C4564
R4568
R4508
R4581
C4591
C4510
D4502
C4513
R4553
R4506
C4507
C4515
C4514
R4592
R4507
C4509
D4602
Q4551
C4508
C4506
C4524
C4505
C4585
R4504
R4505
R4542
E
B
C

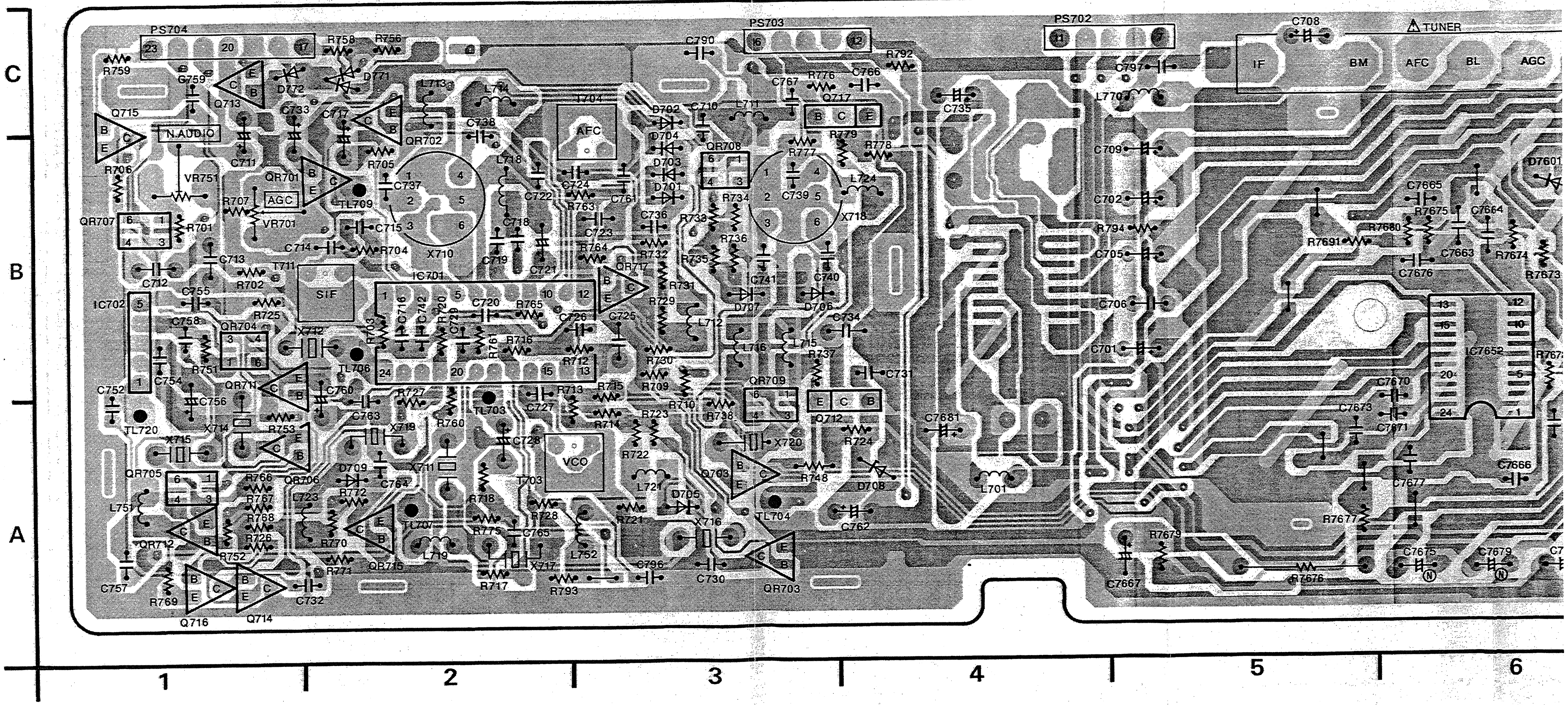

LCH FO
LCH LEVEL
MULTI FO LCH
MULTI FO RCH
BPF FO
RCH FO
RCH LEVEL
VR4501
VR4502
VR4551
VR4552
VR4550
VR4509
VR4507
R4511
R4512
C4561
C4565
C4560
C4559
C4586
C4556
R4561
QR4510
QR4508
QR4509
D4501
R4562
C4557
C4558
R4616
L4502
C4567
C4518
C4568
R4529
C4606
C4621
C4629
C4576
C4619
IC4601
C4537
C4517
R4528
L4501
R4527
C4545
R4578
C4562
R4593
R4615
R4509
C4618
C4653
R4613
C4638
R4612
C4617
R4606
R4610
C4511
C4538
R4586
R4541
C4539
C4563
R4558
C4636
R4656
R4657
R4653
L4601
C4611
C4652
C4564
R4572
C4541
C4591
C4510
D4502
R4508
R4568
R4581
R4611
Q4601
C4512
R4553
C4507
C4515
R4506
D4504
R4651
C4528
R4514
C4514
R4592
R4507
D4503
R4573
R4522
QR4602
C4509
D4602
D4551
Q4501
R4666
C4530
R4654
R4655
R4534
R4539
C4508
C4506
C4524
C4505
R4584
C4504
C4583
C4533
QR4603
C4585
R4504
R4542
R4505
PS4003
PS4002
PS4001
Ja
R4577
R4503
R4530
R4563
C4521
R4513
C4512
R4543
R4569
R4502
R4501
R4554
R4591
R4535
R4551
R4552
45
40
35
31
30
25
20
15
B
C
E
3
4
5
6
7
8

(FOIL SIDE)

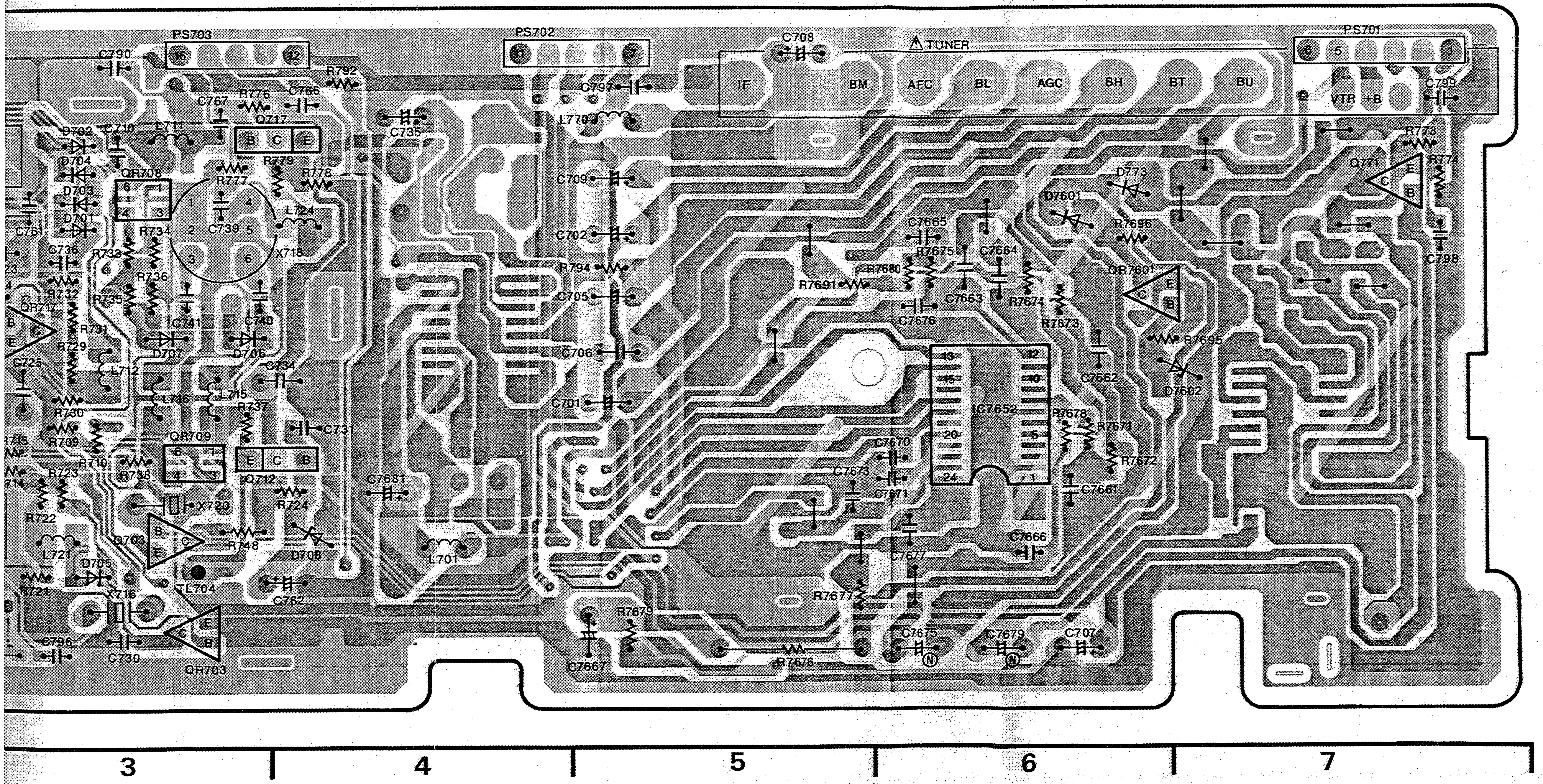
Hi-Fi AUDIO PACK C.B.A.	
Transistor	
Q4501	A-7
Q4551	A-7
Q4601	B-8
Transistor & Resistor	
QR4508	C-6
QR4509	C-7
QR4510	C-6
QR4602	B-8
QR4603	A-8
Integrated Circuit	
IC4501	B-3
IC4601	C-8
Adjustment	
VR4501	C-6
VR4502	C-6
VR4507	C-8
VR4509	C-8
VR4550	C-8
VR4551	C-7
VR4552	C-7
Connector	
PS4001	A-1
PS4001	A-8
PS4002	A-2
PS4002	A-7
PS4003	A-4
PS4003	A-5

ADDRESS INFORMATION

4-23. TV DEMODULATOR PACK C.B.A. (VEP07723B: NV-HD100AM) (VEP07723A: NV-F125BD)


C
B
A
1
2
3
4
5
6
PS704
23
20
17
PS703
16
12
PS702
TUNER
IF
BM
AFC
BL
AGC
C708
R759
C759
Q713
D772
R758
R756
D771
L713
L714
T704
AFC
C790
C767
R776
C766
R792
Q717
C735
C797
L770
Q715
N.AUDIO
C733
C717
QR702
C738
D702
C710
L711
R779
R778
C709
D7601
R706
VR751
C711
QR701
R705
C737
L718
C724
C722
C761
D704
D703
D701
QR708
R777
C739
L724
C7665
C702
R7675
C7664
QR707
R707
AGC
VR701
R701
TL709
C715
C718
R763
C723
C736
R734
R733
X718
R7680
R7691
R794
C7663
R7674
C714
R704
X710
C719
C721
R764
R732
QR717
R736
R735
C741
C740
C705
C7676
R7673
C712
C713
R702
T711
SIF
IC701
R731
D707
D706
IC702
C755
R725
C716
C742
R720
C720
R765
C726
C725
R729
L712
C734
C706
C758
QR704
X742
R703
C729
R761
R716
L716
L715
R737
C701
IC7652
R751
TL706
R712
R730
C731
C752
C754
QR711
C760
R727
R713
R715
R709
R710
QR709
C756
TL703
C727
R714
R723
R738
Q712
C7670
C7673
C7671
TL720
X714
R753
C763
X719
R760
C728
VCO
R722
X720
R724
C7681
X715
QR705
R766
QR706
D709
C764
X711
R718
T703
L721
Q703
R748
D708
L701
C7666
L751
R767
L723
R772
R768
R726
C765
TL707
R775
R728
D705
X716
R721
TL704
C762
C7677
R7677
QR712
R752
R770
L719
L752
R7679
C7675
C7679
R771
QR715
X717
C796
C730
QR703
C757
R717
R793
R7676
C7667
R769
C732
Q716
Q714

AM) (VEP07723A: NV-F125BD)

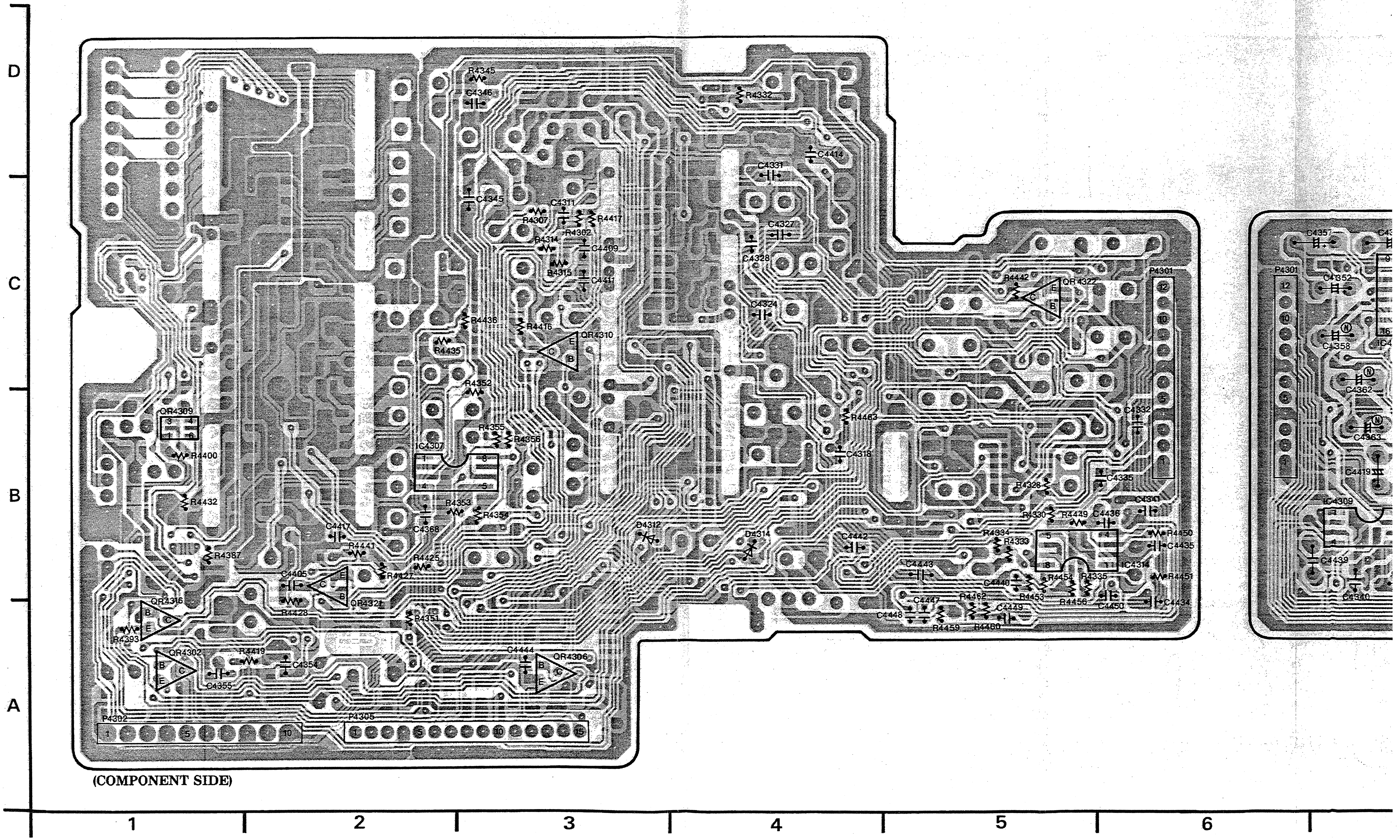


PS703
16
12
PS702
11
7
C708
⚠TUNER
PS701
6
5
1
IF
BM
AFC
BL
AGC
BH
BT
BU
VTR
+B
C790
R792
C767
R776
C766
Q717
B C E
C797
C799
L770
C735
D702
C710
L711
D704
D703
D701
QR708
R777
R779
R778
C709
D773
R773
Q771
E
C
B
R774
D7601
L724
C739
X718
C761
C736
R734
R733
R736
R735
R732
QR717
R731
R729
C725
L712
C741
C740
D707
D706
C734
L716
L715
R737
R730
R709
R710
R738
QR709
Q712
E C B
C731
R723
R722
X720
R724
Q703
R748
D708
L721
D705
R721
X716
TL704
QR703
C796
C730
C762
C702
R794
C705
C706
C701
C7681
L701
C7665
R7675
C7664
R7680
R7691
C7663
R7674
C7676
R7673
R7696
QR7601
R7695
C798
C7662
D7602
IC7652
13
15
20
24
12
10
5
1
R7678
R7671
R7672
C7670
C7673
C7671
C7661
C7666
C7677
R7677
R7679
C7667
R7676
C7675
C7679
C707
3
4
5
6
7

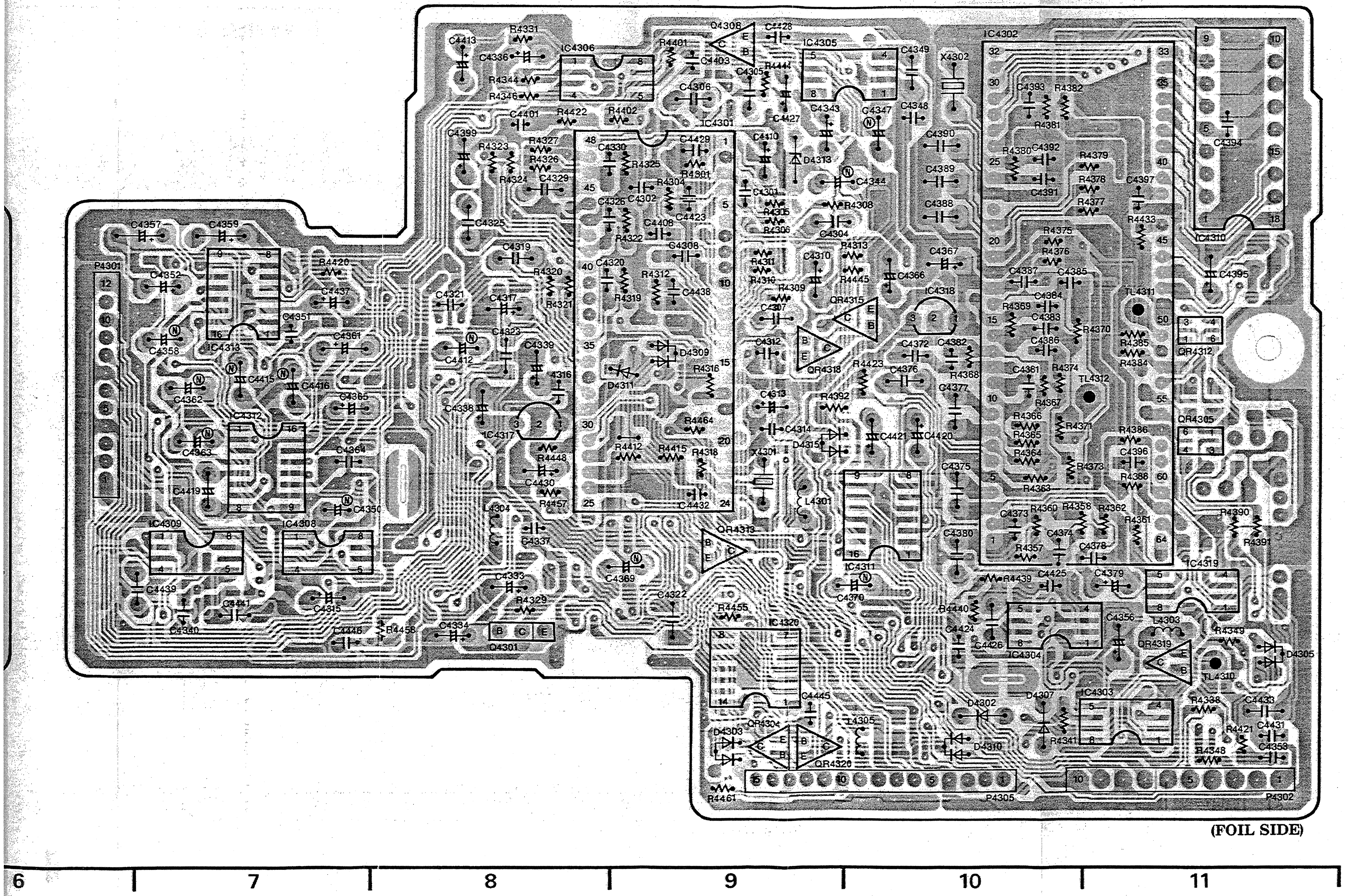
TV DEMODULATOR PACK C.B.A.	
Transistor	
Q703	A-3
Q712	A-3
Q713	C-1
Q714	A-1
Q715	C-1
Q716	A-1
Q717	C-3
Q771	B-7
Transistor & Resistor	
QR701	B-1
QR702	B-2
QR703	A-3
QR704	B-1
QR705	A-1
QR706	A-1
QR707	B-1
QR708	B-3
QR709	B-3
QR711	B-1
QR712	A-1
QR715	A-2
QR717	B-3
QR7601	B-6
Integrated Circuit	
IC701	B-2
IC702	B-1
IC7652	B-6
Test Point	
TL703	A-2
TL704	A-3
TL706	B-2
TL707	A-2
TL709	B-2
TL720	A-1
Adjustment	
T703	A-2
T704	C-3
T711	B-1
VR701	B-1
VR751	B-1
Connector	
PS701	C-7
PS702	C-4
PS703	C-3
PS704	C-1

ADDRESS INFORMATION

4-17. KARAOKE C.B.A. (VEP04395A)


D
C
B
A
1
2
3
4
5
6
R4345
C4346
C4345
R4307
C4311
R4417
R4302
R4314
C4409
R4315
C4411
R4436
R4416
QR4310
R4435
R4352
R4355
R4356
IC4307
R4353
R4354
C4368
C4417
R4441
R4425
R4427
C4405
QR4321
R4428
R4351
C4444
QR4306
QR4309
R4400
R4432
R4387
QR4316
R4393
QR4302
R4419
C4354
C4355
P4302
P4305
R4332
C4414
C4331
C4327
C4328
C4324
R4463
C4318
D4312
D4314
C4442
C4443
C4447
C4448
R4459
R4462
R4460
C4449
C4440
R4453
R4454
R4456
R4335
C4450
R4442
QR4322
P4301
C4332
C4335
C4341
R4328
R4330
R4449
C4436
R4450
C4435
R4434
R4333
IC4314
R4451
C4434
C4357
C4352
C4358
C4362
C4363
C4419
IC4309
C4439
C4340

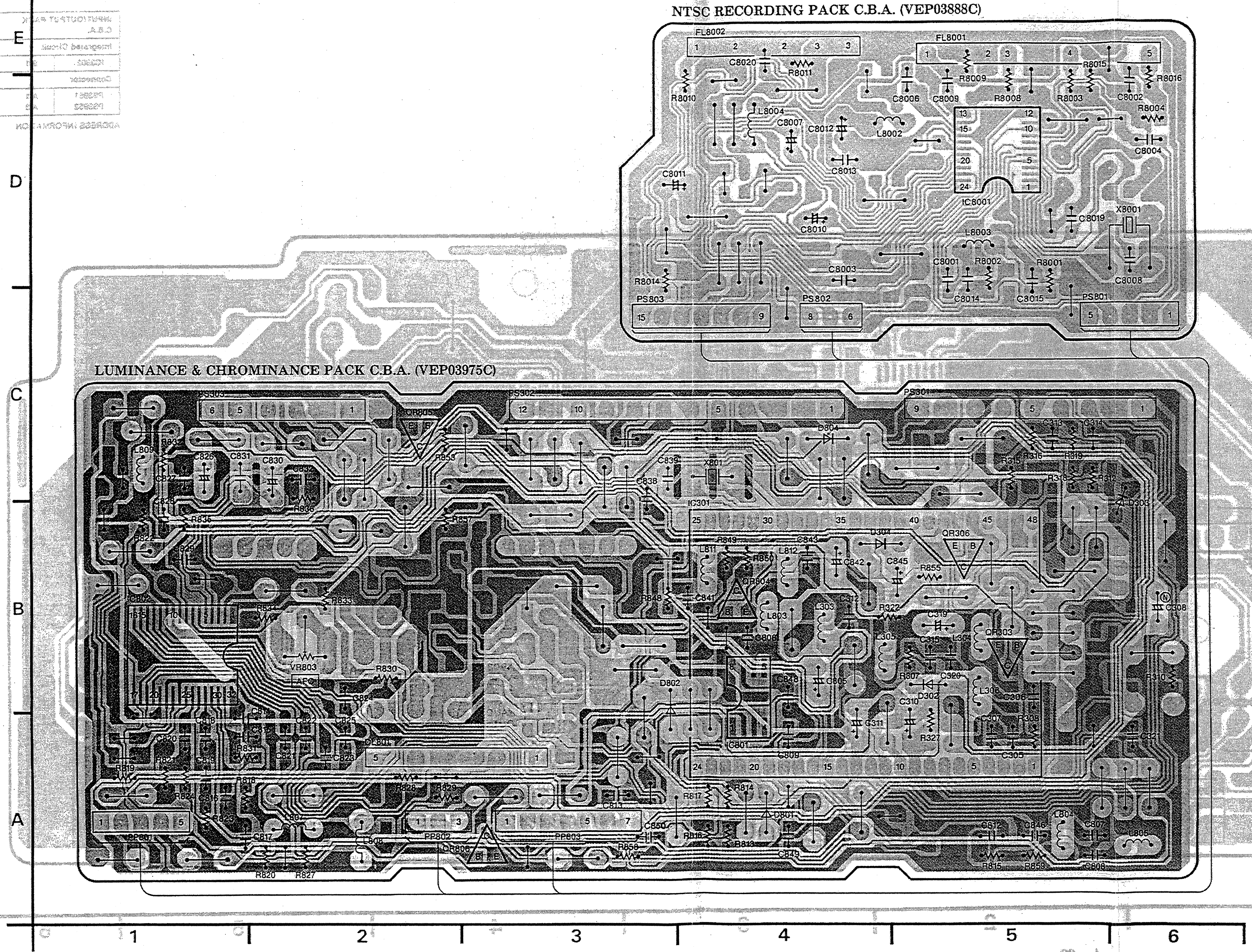
(COMPONENT SIDE)


(FOIL SIDE)
IC4301
IC4302
IC4303
IC4304
IC4305
IC4306
IC4308
IC4309
IC4310
IC4311
IC4312
IC4313
IC4317
IC4318
IC4319
IC4320
P4301
P4302
P4305
Q4301
Q4308
TL4310
TL4311
TL4312
6
7
8
9
10
11

KARAOKE C.B.A.	
Transistor	
Q4301	A-8
Q4308	D-9
Transistor & Resistor	
QR4302	A-1
QR4304	A-9
QR4305	B-11
QR4306	A-3
QR4309	B-1
QR4310	C-3
QR4312	C-11
QR4313	B-9
QR4315	C-9
QR4316	A-1
QR4318	C-9
QR4319	A-11
QR4320	A-9
QR4321	A-2
QR4322	C-5
Integrated Circuit	
IC4301	D-9
IC4302	D-10
IC4303	A-11
IC4304	A-10
IC4305	D-9
IC4306	D-8
IC4307	B-2
IC4308	B-7
IC4309	B-7
IC4310	C-11
IC4311	B-10
IC4312	B-7
IC4313	C-7
IC4314	B-6
IC4317	B-8
IC4318	C-10
IC4319	B-11
IC4320	A-9
Test Point	
TL4310	A-11
TL4311	C-11
TL4312	C-11
Connector	
P4301	C-6
P4301	C-6
P4302	A-1
P4302	A-11
P4305	A-2
P4305	A-10

ADDRESS INFORMATION

4-18. LUMINANCE & CHROMINANCE PACK C.B.A. (VEP03975C)


NTSC RECORDING PACK C.B.A. (VEP03888C)
LUMINANCE & CHROMINANCE PACK C.B.A. (VEP03975C)
E
D
C
B
A
1
2
3
4
5
6
FL8002
FL8001
C8020
R8011
R8010
R8009
R8008
R8003
R8015
R8016
C8006
C8009
C8002
R8004
L8004
C8007
C8012
L8002
C8004
C8011
C8013
IC8001
C8010
C8019
X8001
L8003
C8001
R8002
R8001
C8003
C8014
C8015
C8008
R8014
PS803
PS802
PS801
PS303
PS302
PS301
QR805
L809
R837
C826
C831
C830
C827
R853
C839
X801
C838
IC301
D304
C313
C314
R315
R316
R319
R318
R317
D303
R836
R857
D301
QR306
L811
R849
L812
C843
C842
C845
R855
R850
QR804
C841
R848
L803
L303
R322
C319
C308
C315
L304
QR303
C805
VR803
AFC
R830
R833
C806
L305
R307
D302
C320
C310
L306
C306
R310
D802
C848
C311
R327
C307
R306
C801
C809
C305
C32
IC801
IC802
R819
R821
R824
R818
R828
R829
C813
R817
R814
D801
C850
R816
R813
C849
R858
C812
C846
L804
C807
C808
R815
R859
C808
PP801
PP802
PP803
QR806
C817
L807
L808
R820
R827

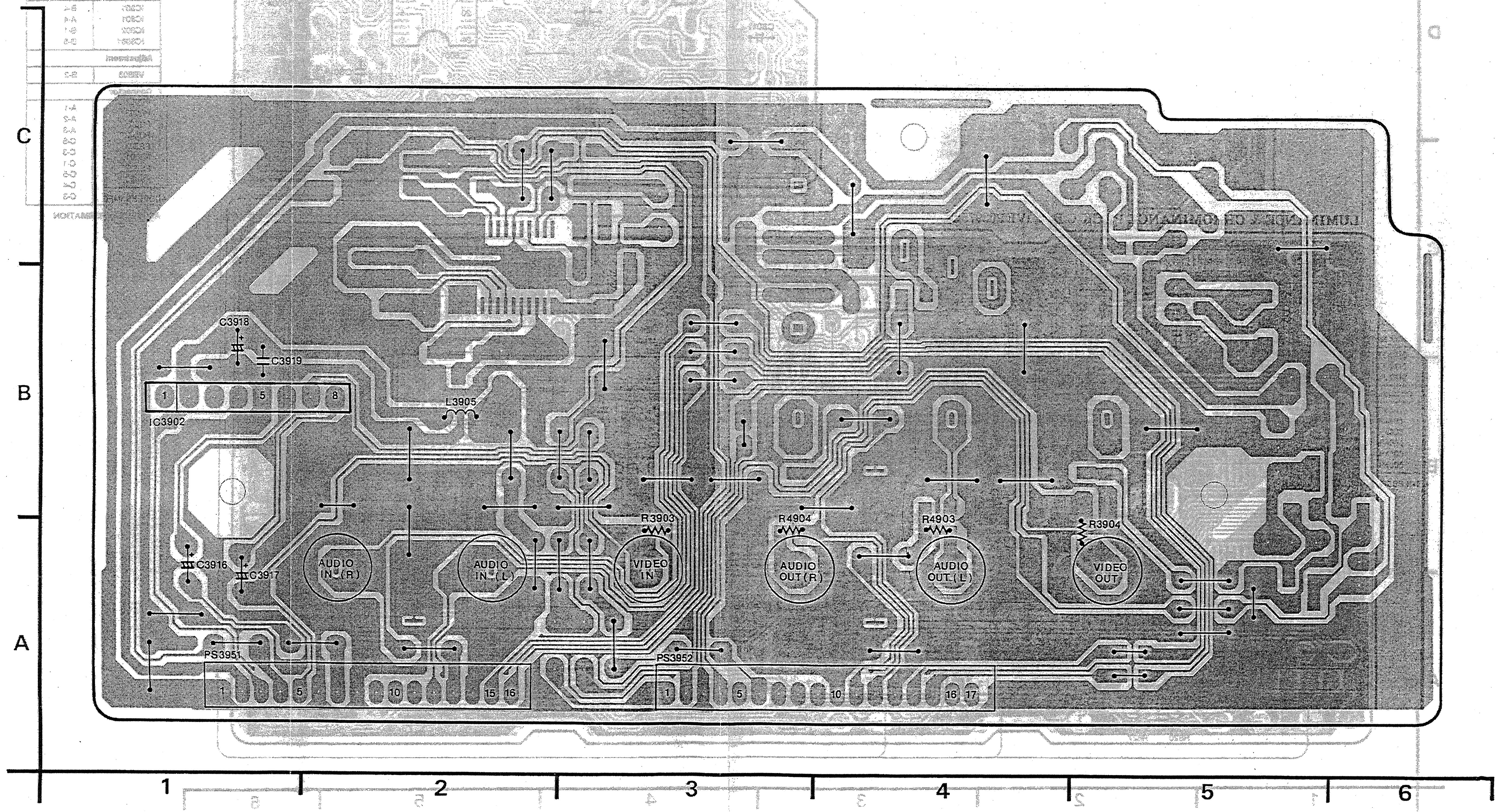
LUMINANCE & CHROMINANCE PACK C.B.A.	
Transistor & Resistor	
QR303	B-5
QR306	B-5
QR804	B-4
QR805	C-2
QR806	A-3
Integrated Circuit	
IC301	B-4
IC801	A-4
IC802	B-1
IC8001	D-5
Adjustment	
VR803	B-2
Connector	
PP801	A-1
PP802	A-2
PP803	A-3
PS301	C-5
PS302	C-3
PS303	C-1
PS801	C-5
PS802	C-4
PS803	C-3

ADDRESS INFORMATION

4-19. INPUT/OUTPUT PACK C.B.A. (VEP03978A)

INPUT/OUTPUT PACK C.B.A.	
Integrated Circuit	
IC3902	B-1
Connector	
PS3951	A-1
PS3952	A-3

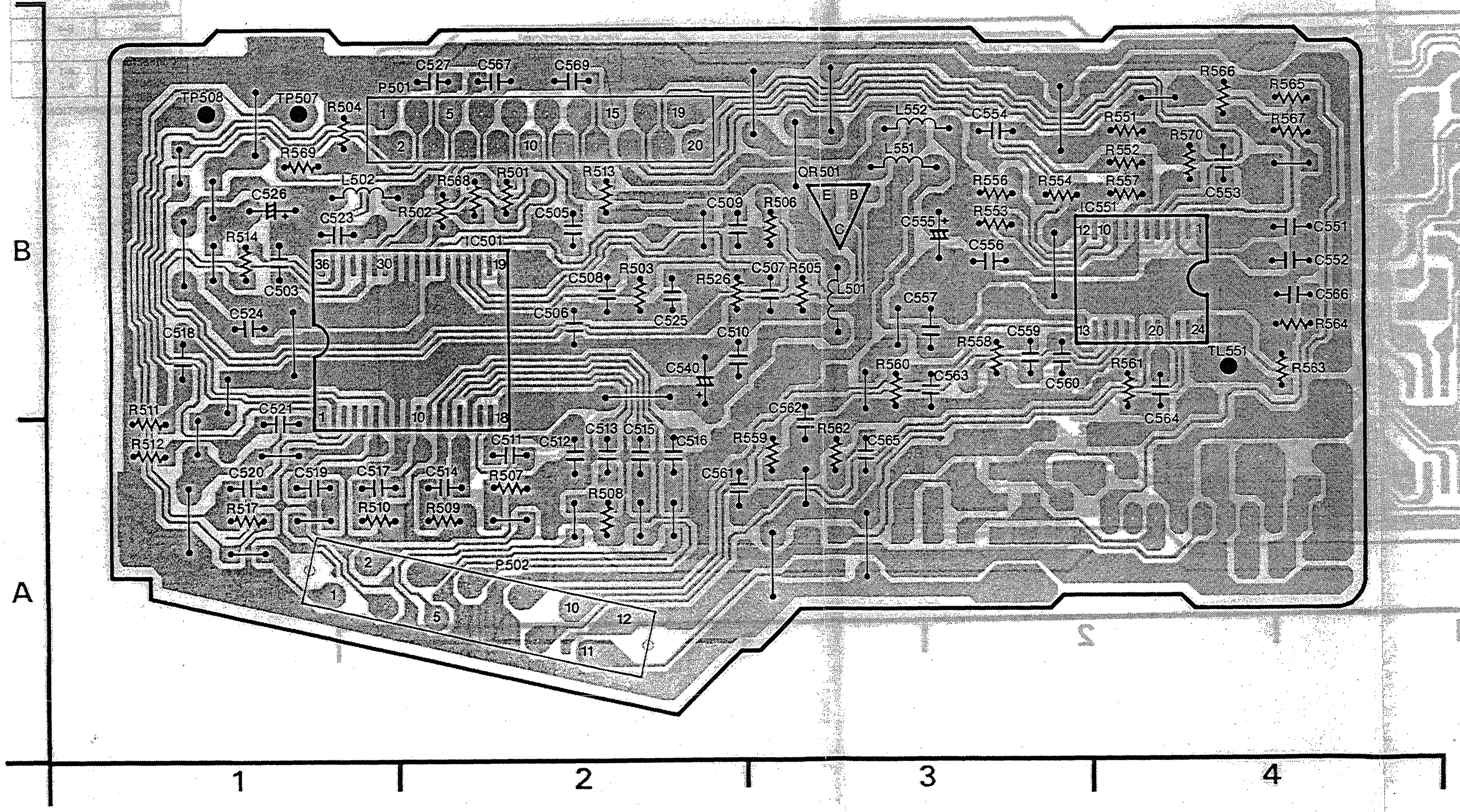
ADDRESS INFORMATION


C
B
A
C3918
C3919
IC3902
1
5
8
L3905
C3916
C3917
AUDIO IN (R)
AUDIO IN (L)
R3903
VIDEO IN
R4904
AUDIO OUT (R)
R4903
AUDIO OUT (L)
R3904
VIDEO OUT
PS3951
1
5
10
15
16
PS3952
1
5
10
16
17
1
2
3
4
5
6

4-20. HEAD AMP C.B.A. (VEP05176C)

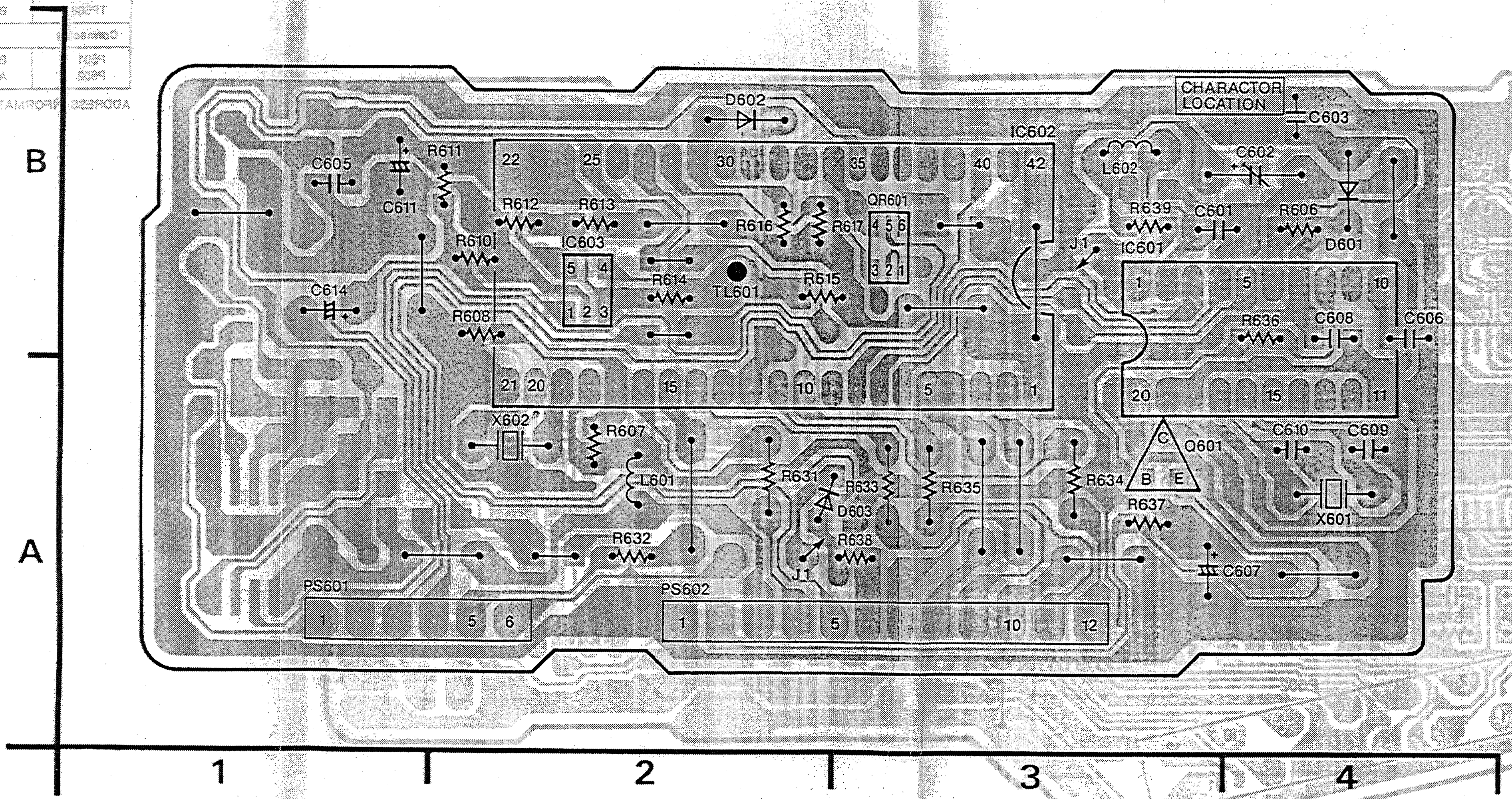
HEAD AMP C.B.A.	
Transistor & Resistor	
QR501	B-3
Integrated Circuit	
IC501 IC551	B-1 B-4
Test Point	
TL551 TP507 TP508	B-4 B-1 B-1
Connector	
P501 P502	B-2 A-1

ADDRESS INFORMATION



B
A
1
2
3
4
TP508
TP507
P501
C527
C567
C569
R504
R569
L502
R568
R501
R513
R502
C526
C523
C505
R514
IC501
C503
C524
C518
C508
R503
C506
C525
R526
C507
R505
C509
R506
QR501
E
B
C
L501
C510
C540
R511
R512
C521
C520
C519
C517
C514
C511
C512
C513
C515
C516
R517
R510
R509
R507
R508
C561
R559
C562
R562
C565
P502
L552
L551
C554
R551
R552
R570
R566
R565
R567
C553
R556
R554
R557
R553
C555
C556
IC551
C551
C552
C566
R564
R563
TL551
C557
R558
C559
C560
R560
C563
R561
C564

4-21. OSD PACK C.B.A. (VEP06853B)


B
A
1
2
3
4
D602
IC602
CHARACTOR LOCATION
C603
C605
R611
C611
22
25
30
35
40
42
L602
C602
R612
R613
R610
IC603
R616
R617
QR601
R639
C601
R606
D601
J1
IC601
C614
R614
TL601
R615
R608
R636
C608
C606
21
20
15
10
5
1
20
15
11
10
5
X602
R607
L601
R631
R633
D603
R635
R634
Q601
C
B
E
C610
C609
X601
R637
R632
R638
C607
PS601
PS602
6
12

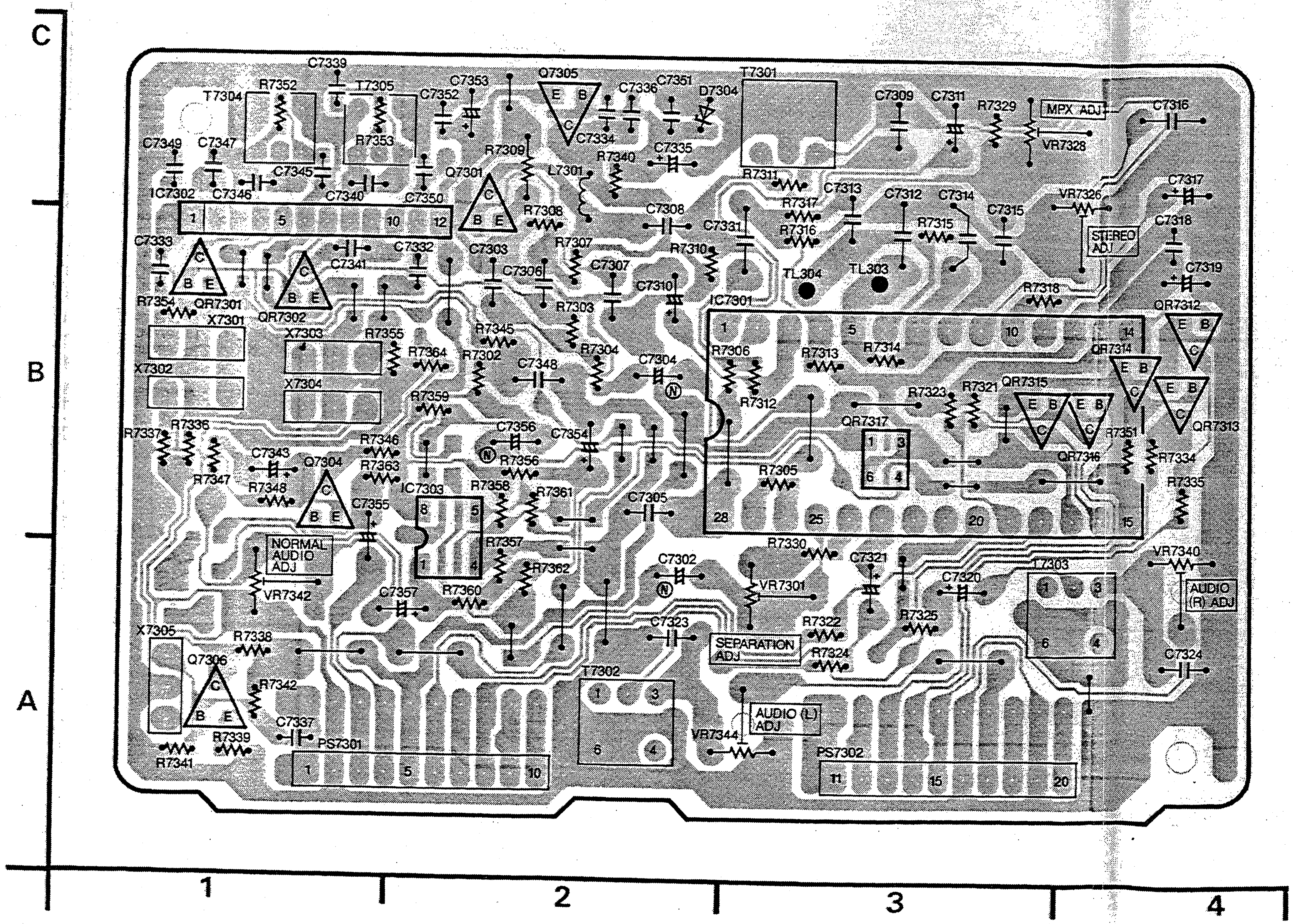
OSD PACK C.B.A.	
Transistor	
Q601	A-3
Transistor & Resistor	
QR601	B-3
Integrated Circuit	
IC601 IC602 IC603	B-3 B-3 B-2
Test Point	
TL601	B-2
Adjustment	
C602	B-4
Connector	
PS601 PS602	A-1 A-2

ADDRESS INFORMATION

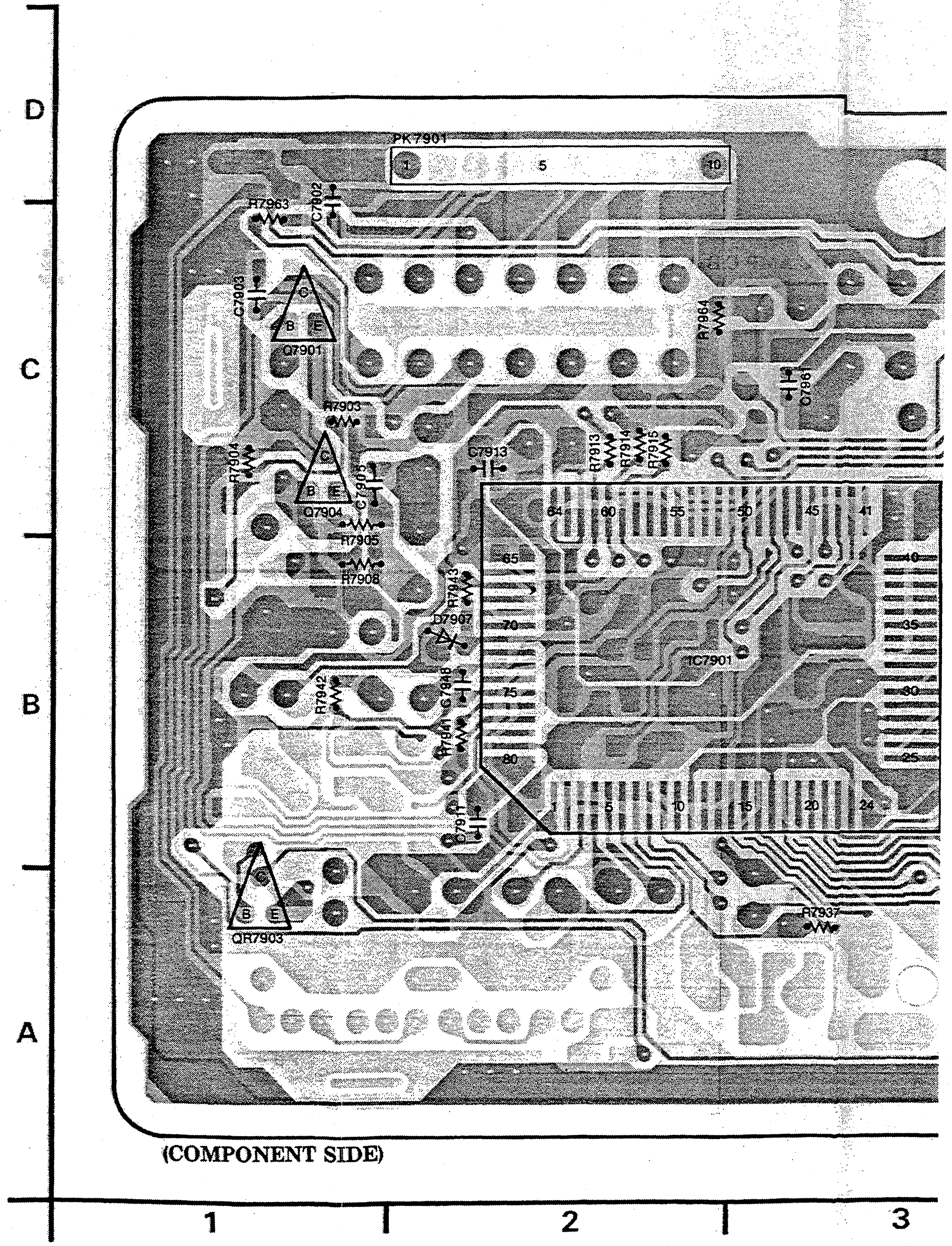
4-24. MULTI DECODER PACK C.B.A. (VEP07725A: NV-HD100AM)

DECODER PACK C.B.A.			
Transistor		**Test Point**	
Q7301	C-2	TL303	B-3
Q7304	B-1	TL304	B-3
Q7305	C-2	**Adjustment**	
Q7306	A-1	VR7301	A-3
Transistor & Resistor		VR7326	C-4
QR7301	B-1	VR7328	C-3
QR7302	B-1	VR7340	A-4
QR7312	B-4	VR7342	A-1
QR7313	B-4	VR7344	A-2
QR7314	B-4	**Connector**	
QR7315	B-3	PS7301	A-1
QR7316	B-4	PS7302	A-3
QR7317	B-3		
Integrated Circuit			
IC7301	B-3		
IC7302	C-1		
IC7303	B-2		

ADDRESS INFORMATION

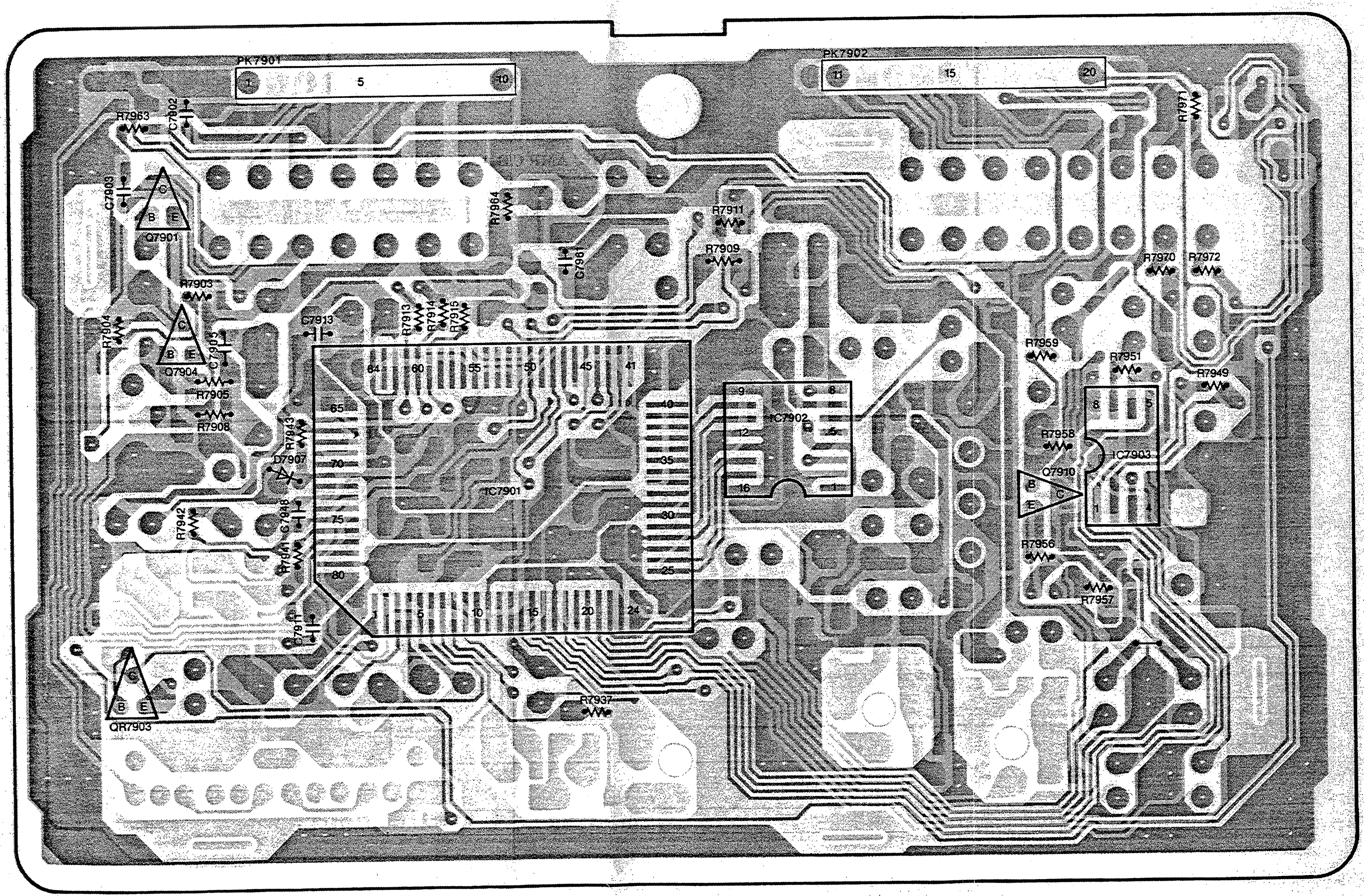

C
B
A
1
2
3
4
T7304
R7352
C7339
T7305
C7352
C7353
Q7305
C7336
C7351
D7304
T7301
C7309
C7311
R7329
MPX ADJ
VR7328
C7316
C7349
C7347
C7345
R7353
Q7301
R7309
C7334
C7335
R7340
L7301
R7311
C7317
IC7302
C7346
C7340
C7350
C7308
R7317
C7313
C7312
C7314
VR7326
STEREO ADJ
C7318
C7333
C7341
C7332
C7303
R7308
C7331
R7316
R7315
C7315
C7319
R7354
QR7301
QR7302
X7301
C7306
R7307
C7307
R7310
C7310
TL304
TL303
R7318
QR7312
X7303
R7355
R7345
R7303
IC7301
X7302
X7304
R7364
R7302
C7348
R7304
C7304
R7306
R7313
R7314
QR7314
R7359
R7312
R7323
R7321
QR7315
R7337
R7336
C7343
Q7304
R7346
C7356
C7354
R7356
QR7317
R7351
QR7313
R7347
R7348
R7363
IC7303
R7358
R7361
R7305
QR7316
R7334
C7355
C7305
R7335
NORMAL AUDIO ADJ
R7357
R7362
R7330
C7321
T7303
VR7340
VR7342
C7357
R7360
C7302
VR7301
C7320
AUDIO (R) ADJ
X7305
R7338
C7323
R7322
R7325
Q7306
R7342
SEPARATION ADJ
R7324
C7324
T7302
C7337
R7339
PS7301
VR7344
AUDIO (L) ADJ
PS7302
R7341

4-25. NICAM DECODER PACK C.B.A. (VEP07675A: NV-F125BD)

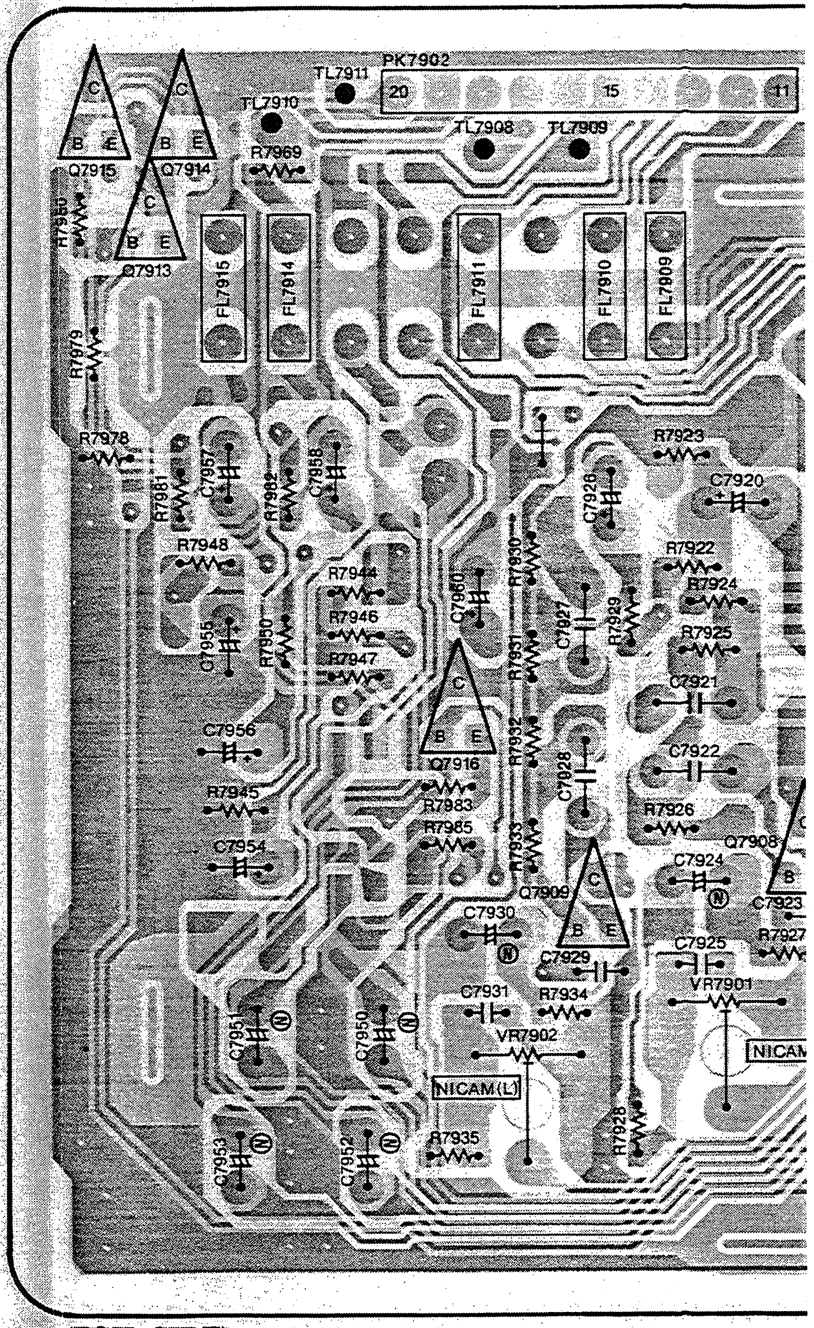

D
C
B
A
1
2
3
PK7901
R7963
C7902
C7903
Q7901
R7964
Q7961
R7903
R7904
C7913
R7913
R7914
R7915
Q7904
R7905
R7908
R7943
D7907
IC7901
R7942
C7948
R7941
C7917
QR7903
R7937

(COMPONENT SIDE)

NICAM DECODER PACK C.B.A. (VEP07675A: NV-F125BD)

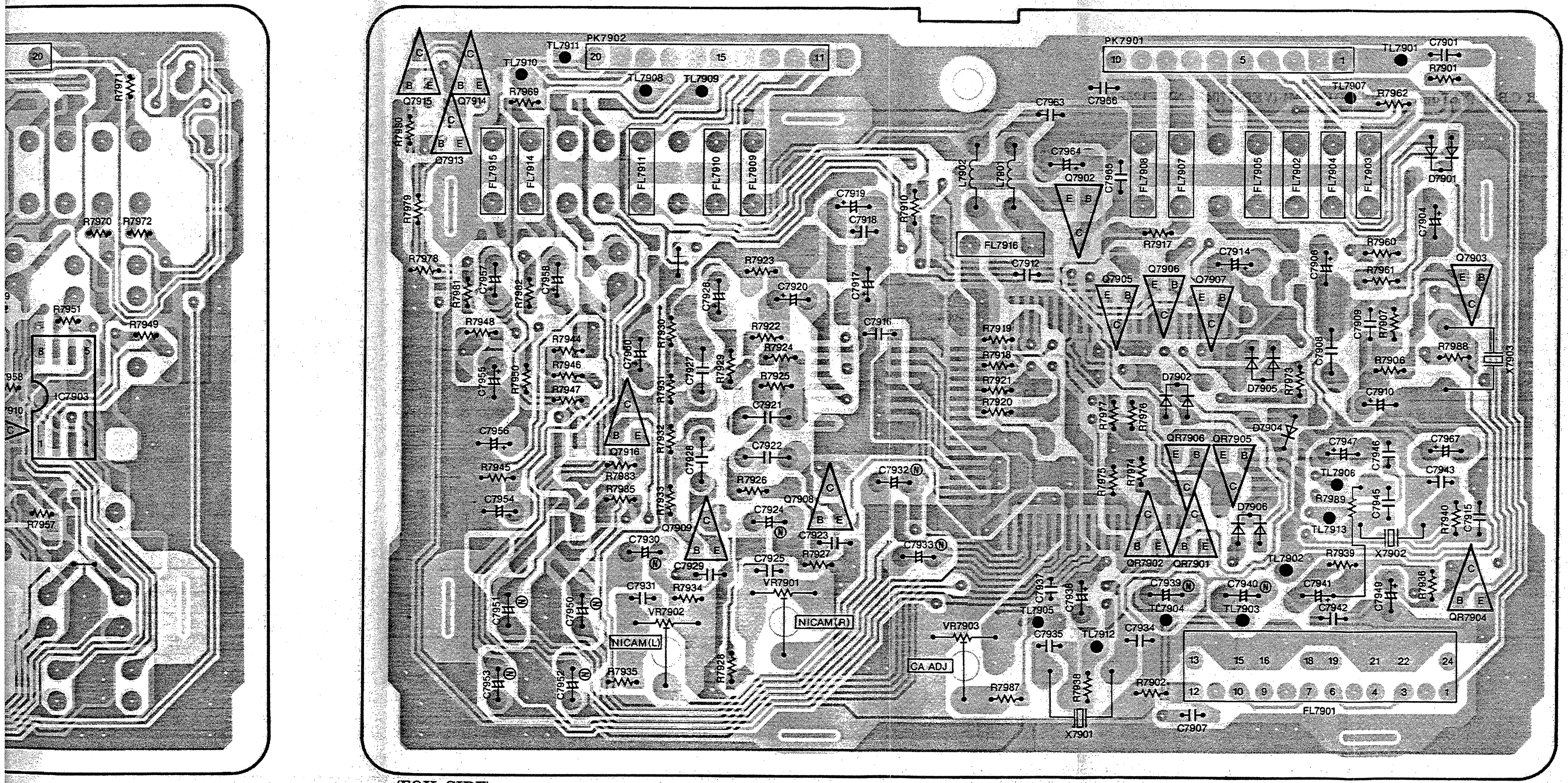

PK7901
1
5
10
PK7902
11
15
20
R7963
C7802
C7903
Q7901
R7964
R7911
R7909
C7961
R7971
R7970
R7972
R7903
R7904
Q7904
R7905
R7908
C7913
R7913
R7914
R7915
IC7901
IC7902
IC7903
R7959
R7951
R7949
R7958
Q7910
R7956
R7957
R7943
D7907
R7942
R7941
QR7903
R7937

(COMPONENT SIDE)


Q7915
Q7914
Q7913
TL7911
TL7910
TL7908
TL7909
PK7902
20
15
11
R7969
R7980
R7979
FL7915
FL7914
FL7911
FL7910
FL7909
R7978
R7981
C7957
R7982
R7923
C7920
R7948
R7944
R7946
R7947
C7955
R7930
C7960
C7927
C7926
R7929
R7922
R7924
R7925
C7921
C7956
R7945
Q7916
R7983
R7985
C7922
R7926
Q7908
C7954
R7932
C7928
R7933
Q7909
C7924
C7923
C7930
C7929
C7925
R7927
C7931
R7934
VR7901
VR7902
C7951
C7950
NICAM(L)
NICAM
C7953
C7952
R7935
R7928

(FOIL SIDE)

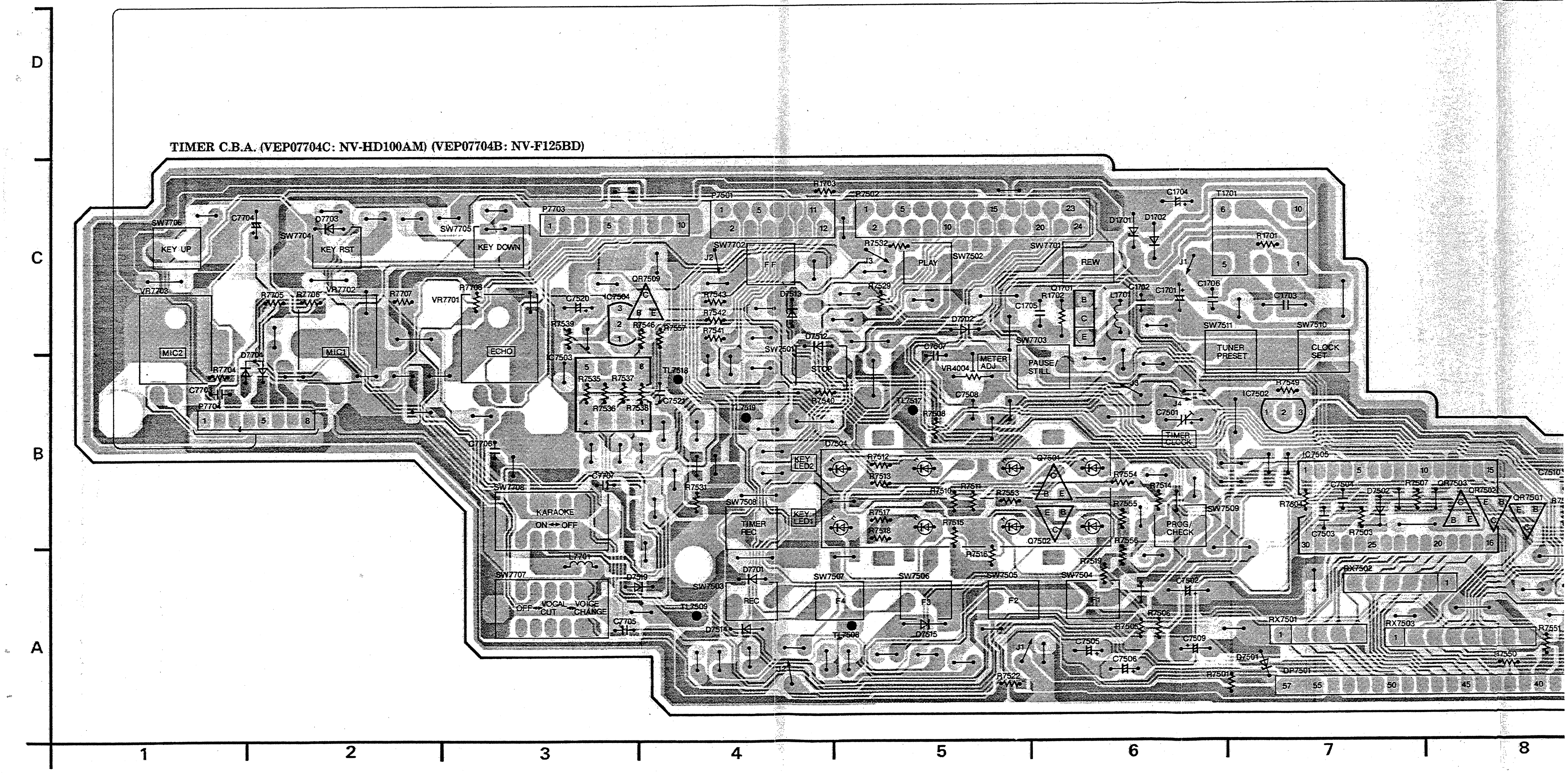
1 2 3 4 5 6 7


PK7902
20
15
11
TL7911
TL7910
TL7908
TL7909
Q7915
Q7914
Q7913
R7969
R7980
R7979
R7978
FL7915
FL7914
FL7911
FL7910
FL7909
R7970
R7972
R7971
R7951
R7949
R7948
R7981
C7957
R7982
C7958
C7955
R7950
R7944
R7946
R7947
C7960
R7930
R7931
R7932
R7933
C7956
Q7916
R7945
R7983
R7985
C7954
R7957
IC7903
C7951
C7950
C7953
C7952
R7935
NICAM(L)
VR7902
C7930
C7931
R7934
C7929
Q7909
C7926
C7927
R7929
C7928
R7923
C7920
R7922
R7924
R7925
C7921
C7922
R7926
C7924
C7923
Q7908
C7925
R7927
VR7901
NICAM(R)
R7928
C7919
C7918
C7917
C7916
R7910
C7932
C7933
VR7903
CA ADJ
PK7901
10
5
1
L7902
L7901
C7963
C7966
C7964
C7965
Q7902
FL7916
C7912
FL7908
FL7907
FL7905
FL7902
FL7904
FL7903
R7917
Q7905
Q7906
Q7907
C7914
R7919
R7918
R7921
R7920
D7902
R7977
R7976
QR7906
QR7905
R7975
R7974
QR7902
QR7901
C7937
C7938
TL7905
C7935
TL7912
R7938
X7901
R7987
C7934
C7939
TL7904
C7940
TL7903
R7902
C7907
FL7901
13
15
16
18
19
21
22
24
12
10
9
7
6
4
3
1
TL7901
C7901
R7901
TL7907
R7962
D7901
C7904
C7906
R7960
R7961
Q7903
C7909
R7907
C7908
R7906
R7988
X7903
D7905
R7973
C7910
D7904
C7947
C7946
C7967
TL7906
C7943
R7989
C7945
TL7913
D7906
R7940
C7915
X7902
TL7902
R7939
C7941
C7942
C7949
R7936
QR7904
(FOIL SIDE)
5
6
7
8
9
10

NICAM DECODER PACK C.B.A.	
Transistor	
Q7901	C-1
Q7902	C-9
Q7903	C-10
Q7904	C-1
Q7905	C-9
Q7906	C-9
Q7907	C-9
Q7908	B-8
Q7909	B-7
Q7910	B-4
Q7913	C-6
Q7914	C-6
Q7915	C-6
Q7916	B-7
Transistor & Resistor	
QR7901	B-9
QR7902	B-9
QR7903	A-1
QR7904	A-10
QR7905	B-9
QR7906	B-9
Integrated Circuit	
IC7901	B-2
IC7902	B-3
IC7903	B-5
Test Point	
TL7901	D-10
TL7902	B-10
TL7903	A-9
TL7904	A-9
TL7905	A-9
TL7906	B-10
TL7907	C-10
TL7908	D-7
TL7909	D-7
TL7910	D-6
TL7911	D-7
TL7912	A-9
TL7913	B-10
Adjustment	
VR7901	A-8
VR7902	A-7
VR7903	A-8
Connector	
PK7901	D-2
PK7901	D-9
PK7902	D-4
PK7902	D-7

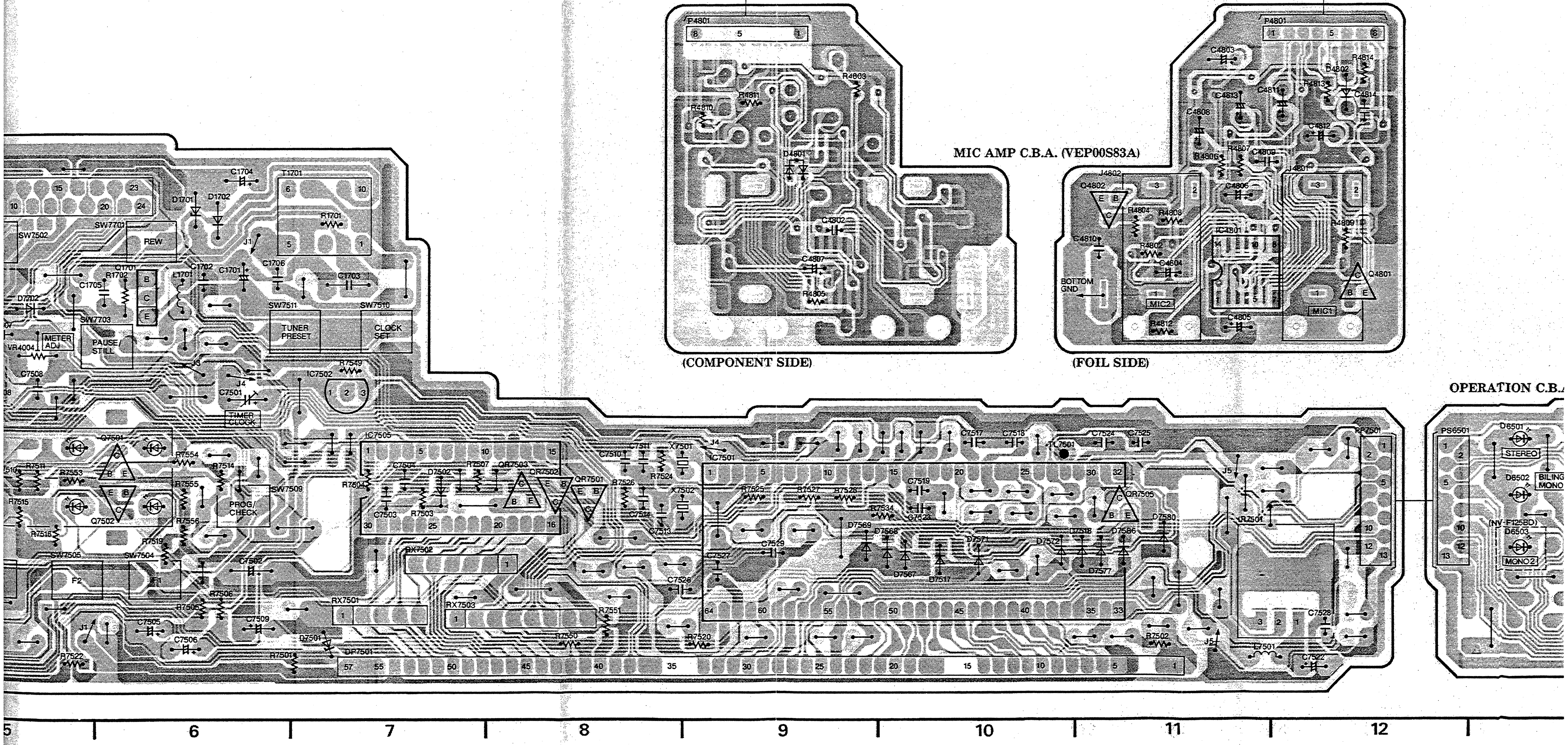
ADDRESS INFORMATION

4-26. TIMER C.B.A. (VEP07704C: NV-HD100AM) (VEP07704B: NV-F125BD) & OPERATION C.B.A. (VEP06852C: NV-HD100AM) (VEP06852B: NV-F125BD)


D
C
B
A
1
2
3
4
5
6
7
8
TIMER C.B.A. (VEP07704C: NV-HD100AM) (VEP07704B: NV-F125BD)
SW7706
KEY UP
C7704
SW7704
D7703
KEY RST
SW7705
KEY DOWN
P7703
P7501
R1703
P7502
C1704
T1701
D1701
D1702
R1701
SW7702
F.F
R7532
PLAY
SW7502
SW7701
REW
J1
J2
J3
J4
VR7703
R7705
R7706
VR7702
R7707
R7708
VR7701
C7520
IC7504
QR7509
R7543
R7542
R7541
D7513
R7529
Q1701
R1702
C1705
L1701
C1702
C1701
C1706
C1703
MIC2
MIC1
ECHO
R7539
R7546
R7557
D7702
SW7703
PAUSE/ STILL
SW7511
TUNER PRESET
SW7510
CLOCK SET
C7503
R7535
R7537
R7536
R7538
C7521
TL7516
SW7501
D7512
STOP
C7507
VR4004
METER ADJ
R7704
D7705
C7703
P7704
TL7519
R7540
TL7517
R7508
C7508
C7501
TIMER CLOCK
IC7502
R7549
C7706
D7504
KEY LED2
R7512
R7513
Q7501
R7554
R7514
IC7505
C7510
SW7708
KARAOKE
ON ↔ OFF
C7707
R7531
SW7508
TIMER REC
KEY LED1
R7510
R7511
R7553
R7517
R7518
R7515
R7555
SW7509
PROG/ CHECK
R7504
C7504
D7502
R7507
QR7503
QR7502
QR7501
C7503
R7503
L7701
R7516
Q7502
R7556
R7519
RX7502
SW7707
OFF
VOCAL CUT
VOICE CHANGE
D7519
SW7503
D7701
REC
SW7507
F4
SW7506
F3
SW7505
F2
SW7504
F1
C7502
TL7509
C7705
D7514
TL7508
D7515
R7505
R7506
RX7501
RX7503
R7551
C7505
C7509
C7506
D7501
R7522
R7501
DP7501
R7550

/EP06852C: NV-HD100AM) (VEP06852B: NV-F125BD)

MIC AMP C.B.A. (VEP00S83A)


P4801
8
5
1
R4803
R4811
R4810
D4801
C4802
C4807
R4805

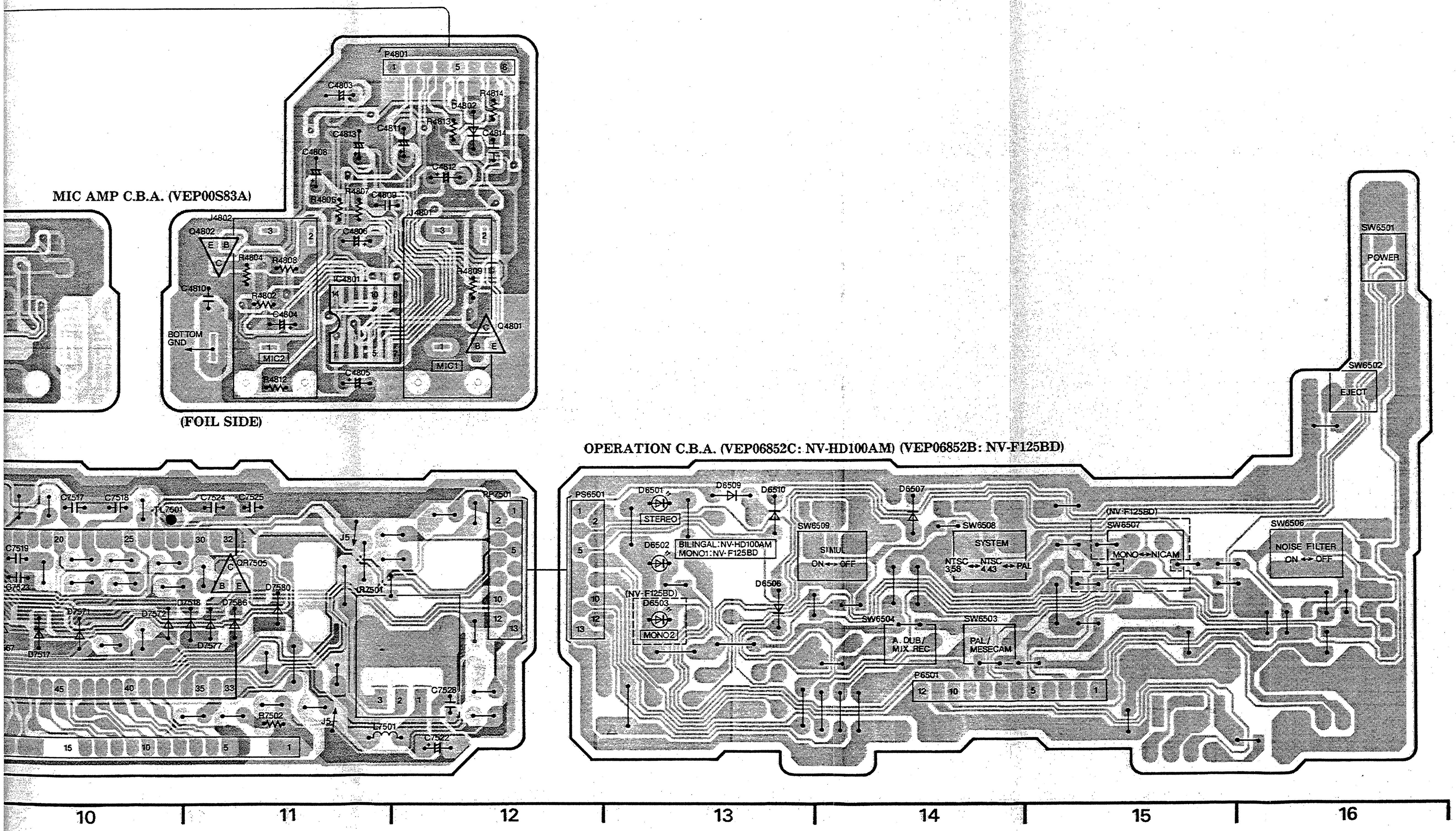
(COMPONENT SIDE)

P4801
1
5
8
C4803
R4814
D4802
R4813
C4811
C4813
C4814
C4808
C4812
R4807
R4806
C4809
J4801
J4802
Q4802
C4806
R4804
R4808
R4809
C4810
R4802
IC4801
C4804
BOTTOM GND
MIC2
MIC1
Q4801
R4812
C4805
E B C

(FOIL SIDE)

OPERATION C.B.A.

C1704
T1701
D1701
D1702
SW7701
REW
SW7502
R1701
J1
Q1701
R1702
C1705
L1701
C1702
C1701
C1706
C1703
D7702
SW7703
SW7511
SW7510
METER ADJ
PAUSE/ STILL
TUNER PRESET
CLOCK SET
VR4004
J3
J4
C7508
R7549
IC7502
C7501
TIMER CLOCK
Q7501
IC7505
C7510
C7511
X7501
IC7501
C7517
C7518
C7524
C7525
TC7501
FP7501
R7511
R7553
R7554
R7514
R7555
SW7509
PROG/ CHECK
C7504
D7502
R7507
QR7503
QR7502
QR7501
R7526
R7524
X7502
R7525
R7527
R7528
C7519
R7534
C7522
QR7505
J5
R7501
R7515
R7516
Q7502
R7556
R7519
C7503
R7503
R7504
C7514
C7513
D7569
D7568
D7571
D7572
D7578
D7586
D7580
C7529
C7527
D7567
D7517
D7577
SW7505
SW7504
F2
F1
C7502
RX7502
C7526
R7505
R7506
RX7501
RX7503
R7551
C7528
C7505
C7509
C7506
D7501
R7550
R7520
R7502
L7501
C7522
R7522
R7501
DP7501
PS6501
D6501
STEREO
D6502
BILING MONO
(NV-F125BD)
D6503
MONO2
5
6
7
8
9
10
11
12


P4801
C4803
R4814
D4802
R4813
C4811
C4813
C4814
C4808
C4812
R4805
R4807
C4809
J4801
J4802
Q4802
E
B
C
C4806
R4804
R4808
R4809
IC4801
C4810
R4802
C4804
Q4801
BOTTOM GND
MIC2
MIC1
R4812
C4805
C7517
C7518
TL7501
C7524
C7525
PP7501
C7519
QR7505
J5
D7580
D7586
D7571
D7572
D7518
D7577
D7517
QR7501
C7528
R7502
L7501
C7522
PS6501
D6501
STEREO
D6509
D6510
D6507
D6502
BILINGAL: NV-HD100AM
MONO1: NV-F125BD
(NV-F125BD)
D6503
MONO2
D6506
SW6509
SIMUL
ON ↔ OFF
SW6508
SYSTEM
NTSC 3.58 ↔ NTSC 4.43 ↔ PAL
(NV-F125BD)
SW6507
MONO ↔ NICAM
SW6506
NOISE FILTER
ON ↔ OFF
SW6504
A. DUB/ MIX REC
SW6503
PAL/ MESECAM
P6501
SW6501
POWER
SW6502
EJECT
10
11
12
13
14
15
16

MIC AMP C.B.A. (VEP00S83A)

(FOIL SIDE)

OPERATION C.B.A. (VEP06852C: NV-HD100AM) (VEP06852B: NV-F125BD)

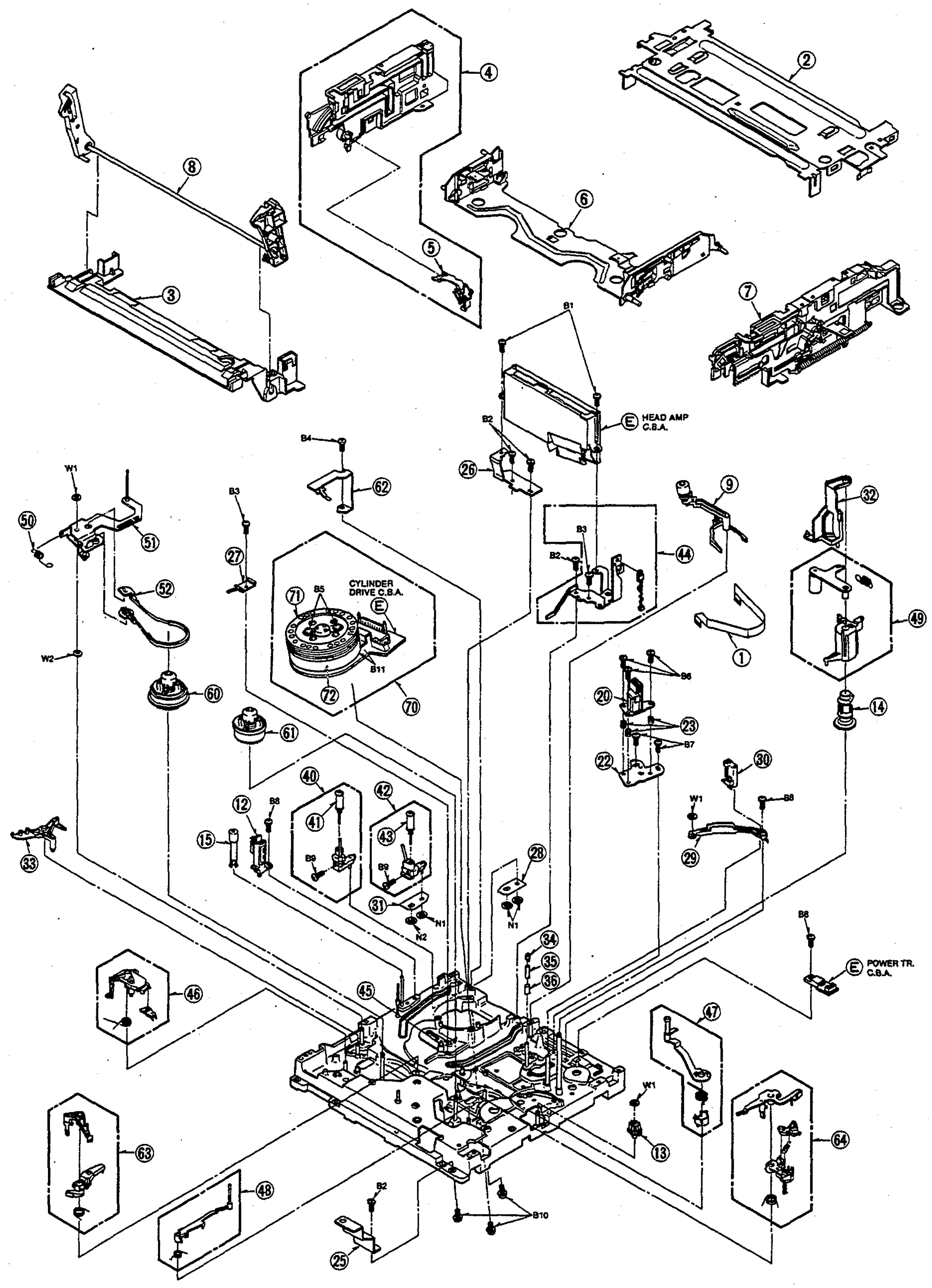
TIMER C.B.A. & OPERATION C.B.A.	
Transistor	
Q1701	C-6
Q4801	C-12
Q4802	C-11
Q7501	B-6
Q7502	B-6
Transistor & Resistor	
QR7501	B-8
QR7502	B-8
QR7503	B-8
QR7505	B-11
QR7509	C-4
Integrated Circuit	
IC4801	C-11
IC7501	B-9
IC7502	B-7
IC7503	B-3
IC7504	C-3
IC7505	B-7
Test Point	
TL7501	B-10
TL7508	A-5
TL7509	A-4
TL7517	B-5
TL7518	B-4
TL7519	B-4
Adjustment	
C7501	B-6
VR4004	B-5
VR7701	C-3
VR7702	C-2
VR7703	C-1
Connector	
P4801	D-9
P4801	D-12
P6501	A-14
P7501	C-4
P7502	C-5
P7703	C-3
P7704	B-1
PP7501	B-12
PS6501	B-12

ADDRESS INFORMATION

SECTION 5
EXPLODED VIEWS & PARTS LIST

5-1. EXPLODED VIEW & MECHANICAL REPLACEMENT PARTS LIST

❶ CHASSIS PARTS SECTION (1)



Note:1.* Be sure to make your orders of replacement parts according to this list.
2. IMPORTANT SAFETY NOTICE
Components identified with the mark <!> have the special characteristics for safety. When replacing any of these components, use only the same type.

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
1(1)		VWJ0653	FLEXIBLE CABLE (6P)	1	P4003-P1501
2(1)		VMA8644	TOP PLATE	1	
3(1)		VMA8787	CASSETTE GUIDE	1	
4(1)		VXA4660	SIDE PLATE (L) UNIT	1	
5(1)		VXL2250	OPENER LEVER UNIT	1	
6(1)		VXA4661	CASSETTE HOLDER PLATE UNIT	1	
7(1)		VXA4806	SIDE PLATE (R) UNIT	1	
8(1)		VXP1339	MAIN SHAFT UNIT	1	
9(1)		VXL2251	CLEANER ARM UNIT	1	
12(1)		VBS0050	FE HEAD	1	
13(1)		VDG0871	CARRIAGE CONNECTION GEAR	1	
14(1)		VDG0886	PINCH CAM GEAR	1	
15(1)		VXP1402	IMPEDANCE ROLLER UNIT	1	
20(1)		VED0182	A/C HEAD (1) UNIT	1	
22(1)		VMA8624	A/C HEAD BASE	1	
23(1)		VMB2515	A/C HEAD SPRING	3	
25(1)		VMA8761	MOUNT ANGLE	1	
26(1)		VMA8763	HEAD AMP MOUNT ANGLE (L)	1	
27(1)		VMC0917	EARTH SPRING	1	
28(1)		VMA8874	INCLIND BASE HOLDER (S)	1	
29(1)		VMD2078	P5 STOPPER BASE	1	
30(1)		VXA4927	P5 POST STOPPER	1	
31(1)		VMA8873	INCLIND BASE HOLDER (T)	1	
32(1)		VMD2101	OPENER PIECE	1	
33(1)		VML2776	TENSION SPRING ARM	1	
34(1)		VMX1544	P4 UPPER LIMITER	1	
35(1)		VMX2175	P4 SLEEVE	1	
36(1)		VMX2176	P4 LOWER LIMITER	1	
40(1)		VXA4982	INCLINED BASE (S) UNIT	1	
41(1)		VXP1415	ROLLER POST	2	
42(1)		VXA4984	INCLINED BASE (T) UNIT	1	
44(1)		VXA4869	HEAD AMP MOUNT ANGLE (R) U.	1	
45(1)		VMS5383	CASSETTE POSITION FIXTURE	1	
46(1)		VXL2310	REVIEW ARM UNIT	1	
47(1)		VXL2306	P5 ARM UNIT	1	
48(1)		VXL2243	TAKE UP TENSION REGULATOR	1	
			ARM UNIT		
49(1)		VXL2246	PINCH ARM UNIT	1	
50(1)		VMB2434	TENSION SPRING	1	
51(1)		VXL2309	TENSION ARM (1) UNIT	1	
52(1)		VX20310	TENSION BAND UNIT	1	
60(1)		VXR0221	SUPPLY REEL TABLE UNIT	1	
61(1)		VXR0222	TAKE UP REEL TABLE UNIT	1	
62(1)		VXS0113	EARTH PLATE	1	
63(1)		VX20312	SUPPLY BRAKE ARM UNIT	1	
64(1)		VX20313	TAKE UP BRAKE ARM UNIT	1	
70(1)		VEG1027	CYLINDER UNIT	1	
71(1)		VEH0601	UPPER CYLINDER UNIT	1	
72(1)		VSC2188	CYLINDER SHIELD PLATE	1	
B1		VHD0773	SCREW	2	
B2		XTV26+6F	SCREW	4	
B3		XTV26+4F	SCREW	2	
B4		XTN3+6FFZ	SCREW	1	
B5		VHD0553	SCREW	2	
B6		VHD0762	SCREW	3	
B7		XTV26+6FZ	SCREW	2	
B8		XTV26+8F	SCREW	3	
B9		VHD0760	SCREW	2	
B10		VHD0342	SCREW	3	
B11		XYNV0029	SCREW	2	
N1		VHN0192	NUT	3	
N2		VHN0193	NUT	1	
W1		VMX2208	WASHER	3	
W2		XWGV26D5G	WASHER	1	

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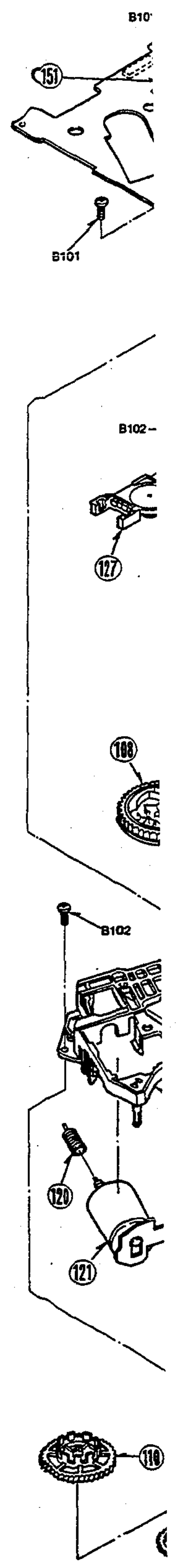
Components identified with the mark <!> have the special characteristics for safety. When replacing any of these components, use only the same type.

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
100(2)		VEK5927	STATOR UNIT	1	
101(2)		VBK0061	FG HEAD	1	
103(2)		VMA8765	ROTOR STOPPER	1	
104(2)		VMX1927	OIL SEAL	2	
105(2)		VXD0140	HOUSING UNIT	1	
106(2)		VXP1350	ROTOR UNIT	1	
107(2)		VXQ0297	THRUST SCREW UNIT	1	
108(2)		VDG0913	MAIN CAM GEAR	1	
109(2)		VDG0861	SUPPLY REEL GEAR	1	
110(2)		VDG0862	TAKE UP REEL GEAR	1	
111(2)		VDG0868	WORM WHEEL GEAR	1	
112(2)		VDG0885	SUB CAM GEAR	1	
113(2)		VDV0235	TIMING BELT	1	
120(2)		VDG0866	WORM GEAR	1	
121(2)		VEM0427	LOADING MOTOR (1) UNIT	1	
123(2)		VMD1942	MOTOR BRACKET	1	
126(2)		VML2725	IDLER CONTROL LEVER	1	
127(2)		VSS0365	MODE SW	1	
128(2)		VXA4797	SS BRAKE BASE UNIT	1	
129(2)		VXA4799	TENSION ROLLER UNIT	1	
140(2)		VXL2229	IDLER ARM UNIT	1	
141(2)		VXL2230	DIRECT LEVER UNIT	1	
142(2)		VXL2299	SUPPLY LOADING ARM UNIT	1	
143(2)		VXL2300	TAKE UP LOADING ARM UNIT	1	
144(2)		VXL2307	MAIN LEVER UNIT	1	
145(2)		VXP1409	CENTRE CLUTCH	1	
150(2)		VMD1926	LED HOLDER	1	
151(2)		VMD1927	PHOTO TRANSISTOR HOLDER	2	
152(2)		VES0695	SAFETY TAB SW	1	
153(2)		VJB00S63	MECHANISM CONNECTION C.B.	1	ELECTRICAL PARTS ON
					THE C.B.A. IS LISTED
					ON ELECTRICAL PARTS
					LIST.
154(2)		VMD2029	REEL SHAFT GUIDE	1	
B101		VHD0772	SCREW	4	
B102		XTV26+8F	SCREW	2	
B103		XTV26+6F	SCREW	3	
B104		VHD0753	SCREW	3	
B105		VHD0754	SCREW	1	
B106		XSB26+4FZ	SCREW	1	
W101		VMX2208	WASHER	3	

❷ CHAS



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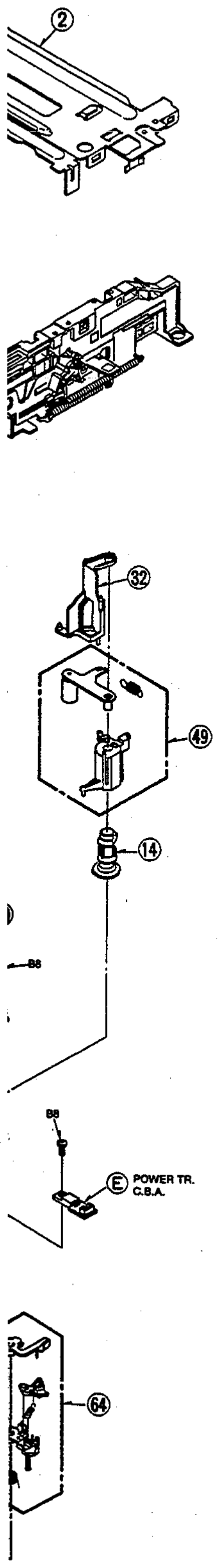
PARTS LIST



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Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
1(1)		VWJ0653	FLEXIBLE CABLE (6P)	1	P4003-P1501
2(1)		VMA8644	TOP PLATE	1	
3(1)		VMA8787	CASSETTE GUIDE	1	
4(1)		VXA4660	SIDE PLATE (L) UNIT	1	
5(1)		VXL2250	OPENER LEVER UNIT	1	
6(1)		VXA4661	CASSETTE HOLDER PLATE UNIT	1	
7(1)		VXA4806	SIDE PLATE (R) UNIT	1	
8(1)		VXP1339	MAIN SHAFT UNIT	1	
9(1)		VXL2251	CLEANER ARM UNIT	1	
12(1)		VBS0050	FE HEAD	1	
13(1)		VDG0871	CARRIAGE CONNECTION GEAR	1	
14(1)		VDG0886	PINCH CAM GEAR	1	
15(1)		VXP1402	IMPEDANCE ROLLER UNIT	1	
20(1)		VED0182	A/C HEAD (1) UNIT	1	
22(1)		VMA8624	A/C HEAD BASE	1	
23(1)		VMB2515	A/C HEAD SPRING	3	
25(1)		VMA8761	MOUNT ANGLE	1	
26(1)		VMA8763	HEAD AMP MOUNT ANGLE (L)	1	
27(1)		VMC0917	EARTH SPRING	1	
28(1)		VMA8874	INCLIND BASE HOLDER (S)	1	
29(1)		VMD2078	P5 STOPPER BASE	1	
30(1)		VXA4927	P5 POST STOPPER	1	
31(1)		VMA8873	INCLIND BASE HOLDER (T)	1	
32(1)		VMD2101	OPENER PIECE	1	
33(1)		VML2776	TENSION SPRING ARM	1	
34(1)		VMX1544	P4 UPPER LIMITER	1	
35(1)		VMX2175	P4 SLEEVE	1	
36(1)		VMX2176	P4 LOWER LIMITER	1	
40(1)		VXA4982	INCLINED BASE (S) UNIT	1	
41(1)		VXP1415	ROLLER POST	2	
42(1)		VXA4984	INCLINED BASE (T) UNIT	1	
44(1)		VXA4869	HEAD AMP MOUNT ANGLE (R) U.	1	
45(1)		VMS5383	CASSETTE POSITION FIXTURE	1	
46(1)		VXL2310	REVIEW ARM UNIT	1	
47(1)		VXL2306	P5 ARM UNIT	1	
48(1)		VXL2243	TAKE UP TENSION REGULATOR	1	
			ARM UNIT		
49(1)		VXL2246	PINCH ARM UNIT	1	
50(1)		VMB2434	TENSION SPRING	1	
51(1)		VXL2309	TENSION ARM (1) UNIT	1	
52(1)		VX20310	TENSION BAND UNIT	1	
60(1)		VXR0221	SUPPLY REEL TABLE UNIT	1	
61(1)		VXR0222	TAKE UP REEL TABLE UNIT	1	
62(1)		VXS0113	EARTH PLATE	1	
63(1)		VX20312	SUPPLY BRAKE ARM UNIT	1	
64(1)		VX20313	TAKE UP BRAKE ARM UNIT	1	
70(1)		VEG1027	CYLINDER UNIT	1	
71(1)		VEHD601	UPPER CYLINDER UNIT	1	
72(1)		VSC2188	CYLINDER SHIELD PLATE	1	
B1		VHD0773	SCREW	2	
B2		XTV26+6F	SCREW	4	
B3		XTV26+4F	SCREW	2	
B4		XTN3+6FFZ	SCREW	1	
B5		VHD0553	SCREW	2	
B6		VHD0762	SCREW	3	
B7		XTV26+6FZ	SCREW	2	
B8		XTV26+8F	SCREW	3	
B9		VHD0760	SCREW	2	
B10		VHD0342	SCREW	3	
B11		XYNV0029	SCREW	2	
N1		VHN0192	NUT	3	
N2		VHN0193	NUT	1	
W1		VMX2208	WASHER	3	
W2		XWGV26D5G	WASHER	1	

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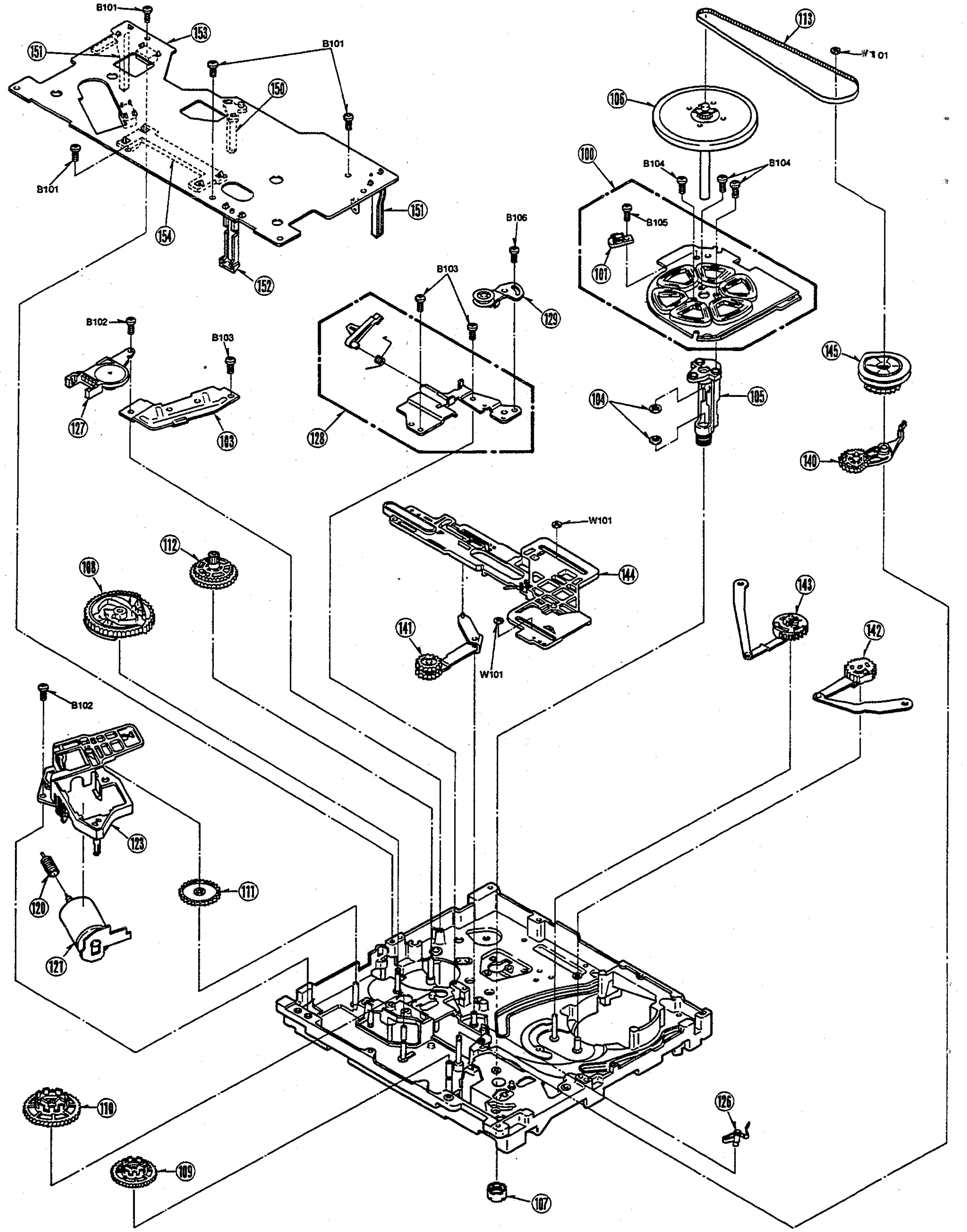
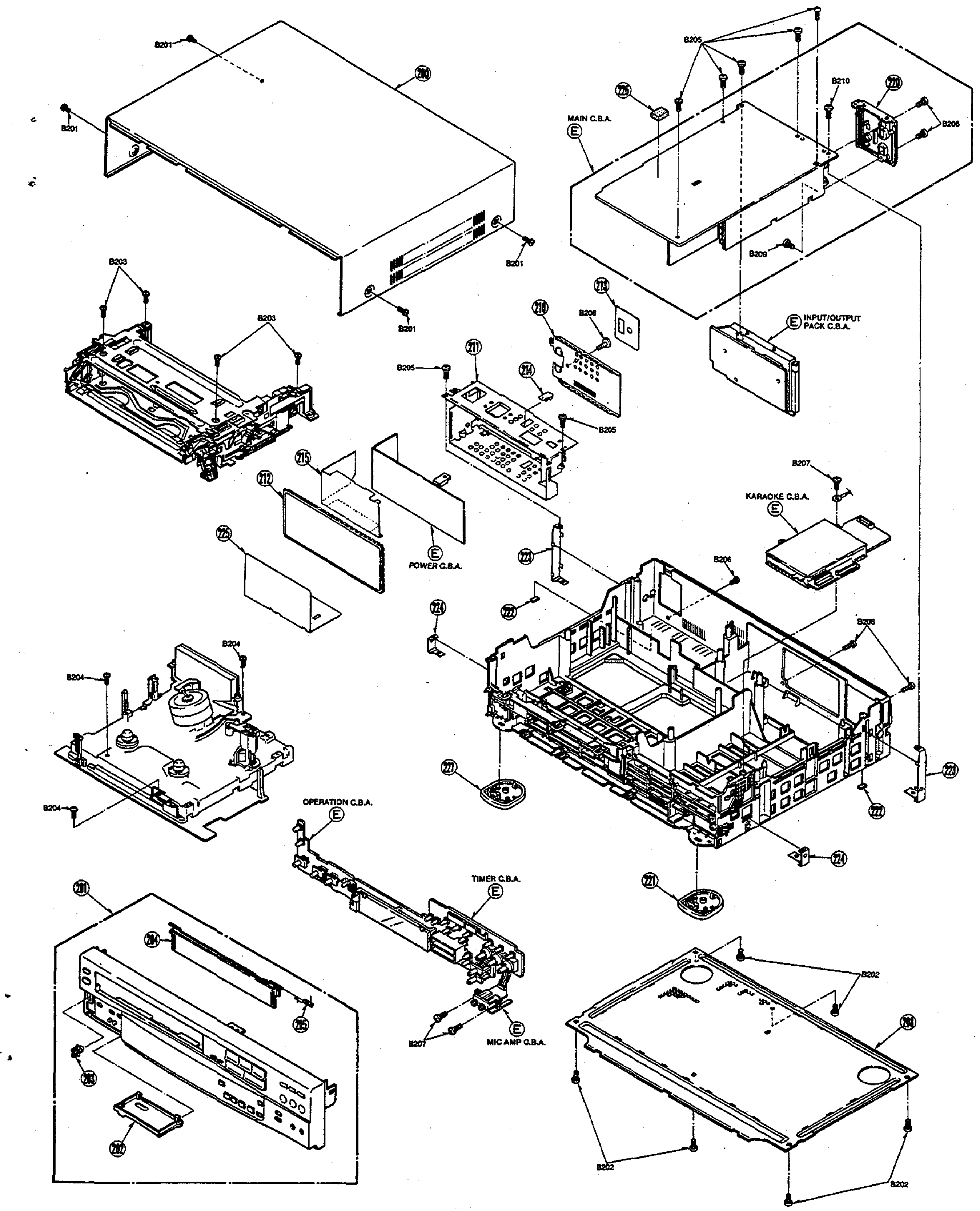
Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
100(2)		VEK5927	STATOR UNIT	1	
101(2)		VBK0061	FG HEAD	1	
103(2)		VMA8765	ROTOR STOPPER	1	
104(2)		VMX1927	OIL SEAL	2	
105(2)		VXD0140	HOUSING UNIT	1	
106(2)		VXP1350	ROTOR UNIT	1	
107(2)		VXQ0297	THRUST SCREW UNIT	1	
108(2)		VDG0913	MAIN CAM GEAR	1	
109(2)		VDG0861	SUPPLY REEL GEAR	1	
110(2)		VDG0862	TAKE UP REEL GEAR	1	
111(2)		VDG0868	WORM WHEEL GEAR	1	
112(2)		VDG0885	SUB CAM GEAR	1	
113(2)		VDV0235	TIMING BELT	1	
120(2)		VDG0866	WORM GEAR	1	
121(2)		VEM0427	LOADING MOTOR (1) UNIT	1	
123(2)		VMD1942	MOTOR BRACKET	1	
126(2)		VML2725	IDLER CONTROL LEVER	1	
127(2)		VSS0365	MODE SW	1	
128(2)		VXA4797	SS BRAKE BASE UNIT	1	
129(2)		VXA4799	TENSION ROLLER UNIT	1	
140(2)		VXL2229	IDLER ARM UNIT	1	
141(2)		VXL2230	DIRECT LEVER UNIT	1	
142(2)		VXL2299	SUPPLY LOADING ARM UNIT	1	
143(2)		VXL2300	TAKE UP LOADING ARM UNIT	1	
144(2)		VXL2307	MAIN LEVER UNIT	1	
145(2)		VXP1409	CENTRE CLUTCH	1	
150(2)		VMD1926	LED HOLDER	1	
151(2)		VMD1927	PHOTO TRANSISTOR HOLDER	2	
152(2)		VES0695	SAFETY TAB SW	1	
153(2)		VJB00S63	MECHANISM CONNECTION C.B.	1	ELECTRICAL PARTS ON
					THE C.B.A. IS LISTED
					ON ELECTRICAL PARTS
					LIST.
154(2)		VMD2029	REEL SHAFT GUIDE	1	
B101		VHD0772	SCREW	4	
B102		XTV26+8F	SCREW	2	
B103		XTV26+6F	SCREW	3	
B104		VHD0753	SCREW	3	
B105		VHD0754	SCREW	1	
B106		XSB26+4FZ	SCREW	1	
W101		VMX2208	WASHER	3	

❷ CHASSIS PARTS SECTION (2)



❸ CASING PARTS SECTION



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2.IMPORTANT SAFETY NOTICE
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Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
200(3)		VGM0980	TOP PANEL	1	
201(3)		VYP5204	FRONT PANEL UNIT	1	NV-HD100AM
201(3)		VYP5199	FRONT PANEL UNIT	1	NV-F125BD
202(3)		VYF1950	DOOR PANEL UNIT	1	
203(3)		VGQ0550	DOOR LOCK PIECE	1	
204(3)		VKF1978	BLINDER PANEL	1	
205(3)		VMB2521	BLINDER SPRING	1	
208(3)		VKU0374	BOTTOM PLATE	1	
210(3)		VSC3691	POWER SHIELD COVER (TOP)	1	
211(3)		VXA3571	POWER SHIELD COVER (MAIN)	1	
212(3)		VSC2237	POWER SHIELD COVER (BOTTOM)	1	
213(3)		VGH3025	NAME PLATE	1	
214(3)		VMC0357	IC HOLDER SPRING	1	
215(3)		VMZ1950	POWER BARRIER	1	
220(3)		VJH0682	RF ANT TERMINAL PLATE	1	
221(3)		VKA0154	LEG	2	
222(3)		VKA0122	FOOT	2	
223(3)		VMP3820	SIDE ANGLE (R)	2	
224(3)		VMP3821	SIDE ANGLE (L)	2	
225(3)		VMZ1621	SHIELD BARRIER	1	
226(3)		VMT0506	MAIN C.B.A. SPACER	1	
B201		XTW3+10TFZ	SCREW	4	
B202		VHD0059	SCREW	6	
B203		XTV26+8FR	SCREW	4	
B204		VHD0168	SCREW	3	
B205		VHD0773	SCREW	7	
B206		XTV3+12JFZ	SCREW	5	
B207		XTV3+10JR	SCREW	3	
B208		VHD0742	SCREW	1	
B209		XTV3+6F	SCREW	1	
B210		XTV3+8G	SCREW	1	

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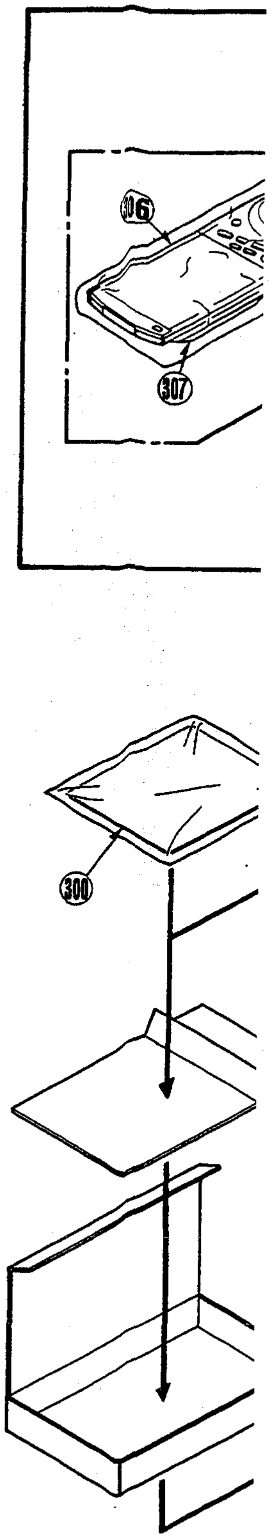
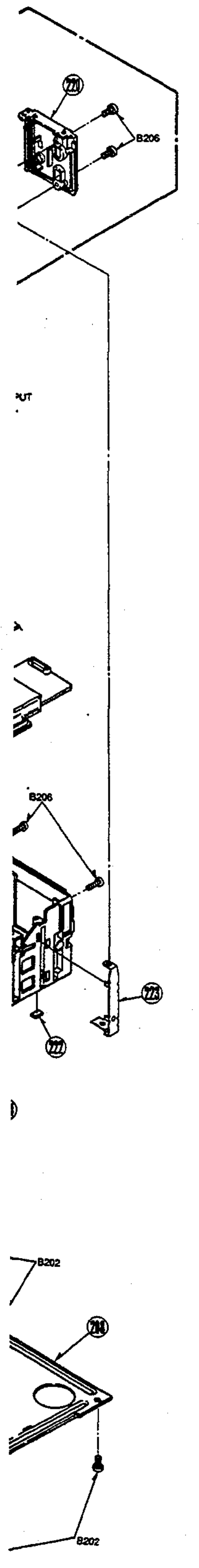
Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
300(4)		VQT5159	OPERATING INSTRUCTIONS	1	<!>NV-HD100AM
			(ENGLISH/ARABIC)		
300(4)		VQT5153	OPERATING INSTRUCTIONS	1	<!>NV-F125BD
			(ENGLISH/CHINESE)		
302(4)		VJA0376	DIN RF CABLE	1	
303(4)		VJA0713	AC CORD	1	<!>NV-HD100AM
303(4)		VJA0667	AC CORD	1	<!>NV-F125BD
304(4)		VJA0231	AUDIO CABLE	1	NV-HD100AM
305(4)		VEQ1502	REMOTE CONTROLLER	1	
306(4)		VGP3346	DOOR PANEL	1	
307(4)		VKF1980	BATTERY COVER	1	
308(4)		VFA0028	AV CABLE	1	NV-F125BD
310(4)		VJP2974	AC PLUG ADAPTOR	1	NV-HD100AM
310(4)		VJS1993	AC PLUG ADAPTOR	1	NV-F125BD
311(4)		VFA0021	MATCHING ADAPTOR	1	NV-F125BD
312(4)		VSQ0662	SEPARATION ADAPTOR	1	
313(4)		VFA0138	MICROPHONE	1	NV-HD100AM
315(4)		VPK1419	ACCESSORIES PACKING	1	NV-HD100AM
315(4)		VPK0834	ACCESSORIES PACKING	1	NV-F125BD
316(4)		VPN3333	ACCESSORIES PAD	1	NV-HD100AM
318(4)		VPN3562	CUSHION (R)	1	NV-HD100AM
318(4)		VPN3555	CUSHION (R)	1	NV-F125BD
319(4)		VPN3563	CUSHION (L)	1	NV-HD100AM
319(4)		VPN3556	CUSHION (L)	1	NV-F125BD
320(4)		VPG6755	PACKING	1	NV-HD100AM
320(4)		VPG6750	PACKING	1	NV-F125BD
321(4)		VPQ0001	HANDLE	1	
			SERVICE FIXTURES & TOOLS		
		VFJ8125H3F	VHS ALIGNMENT TAPE(PAL)	1	
		VFK0335	RETAINING RING REMOVER	1	
			(3mm/4mm)		
		VFK0329	POST ADJUSTMENT SCREWDRIVER	1	
		VFK0326	HEX WRENCH SET	1	
		VFK0132	BACK TENSION METER	1	
		VFK0343	CHECK LIGHT	1	
		VFK27	HEAD CLEANING STICK	1	
		MOR265	MORLYTONE GREASE	1	
		VFK0341	UPPER CYLINDER REMOVER	1	
		VFK0680	WHITE GREASE	1	
		VFK0851	CENTRE FIXING TOOL	1	
		VFK0330	FINE ADJUSTMENT GEAR DRIVER	1	

❹ PACKING P





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Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
200(3)	VGM0980	TOP PANEL	1	
201(3)	VYP5204	FRONT PANEL UNIT	1	NV-HD100AM
201(3)	VYP5199	FRONT PANEL UNIT	1	NV-F125BD
202(3)	VYP1950	DOOR PANEL UNIT	1	
203(3)	VGQ0550	DOOR LOCK PIECE	1	
204(3)	VKF1978	BLINDER PANEL	1	
205(3)	VMB2521	BLINDER SPRING	1	
208(3)	VKU0374	BOTTOM PLATE	1	
210(3)	VSC3691	POWER SHIELD COVER (TOP)	1	
211(3)	VXA3571	POWER SHIELD COVER (MAIN)	1	
212(3)	VSC2237	POWER SHIELD COVER (BOTTOM)	1	
213(3)	VGH3025	NAME PLATE	1	
214(3)	VMC0357	IC HOLDER SPRING	1	
215(3)	VMZ1950	POWER BARRIER	1	
220(3)	VJH0682	RF ANT TERMINAL PLATE	1	
221(3)	VKA0154	LEG	2	
222(3)	VKA0122	FOOT	2	
223(3)	VMP3820	SIDE ANGLE (R)	2	
224(3)	VMP3821	SIDE ANGLE (L)	2	
225(3)	VMZ1621	SHIELD BARRIER	1	
226(3)	VMT0506	MAIN C.B.A. SPACER	1	
B201	XTW3+10TFZ	SCREW	4	
B202	VHD0059	SCREW	6	
B203	XTV26+8FR	SCREW	4	
B204	VHD0168	SCREW	3	
B205	VHD0773	SCREW	7	
B206	XTV3+12JFZ	SCREW	5	
B207	XTV3+10JR	SCREW	3	
B208	VHD0742	SCREW	1	
B209	XTV3+6F	SCREW	1	
B210	XTV3+8G	SCREW	1	

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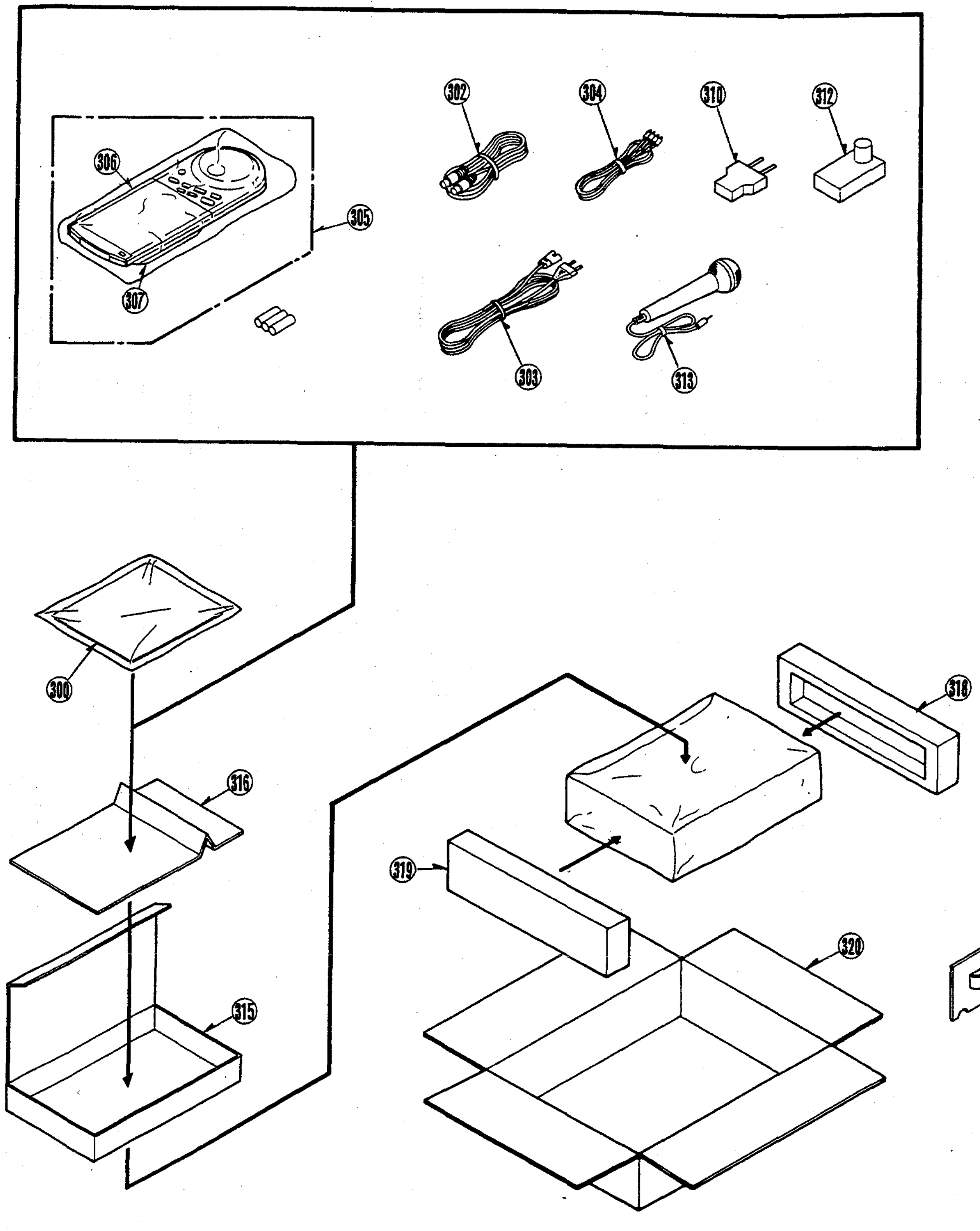
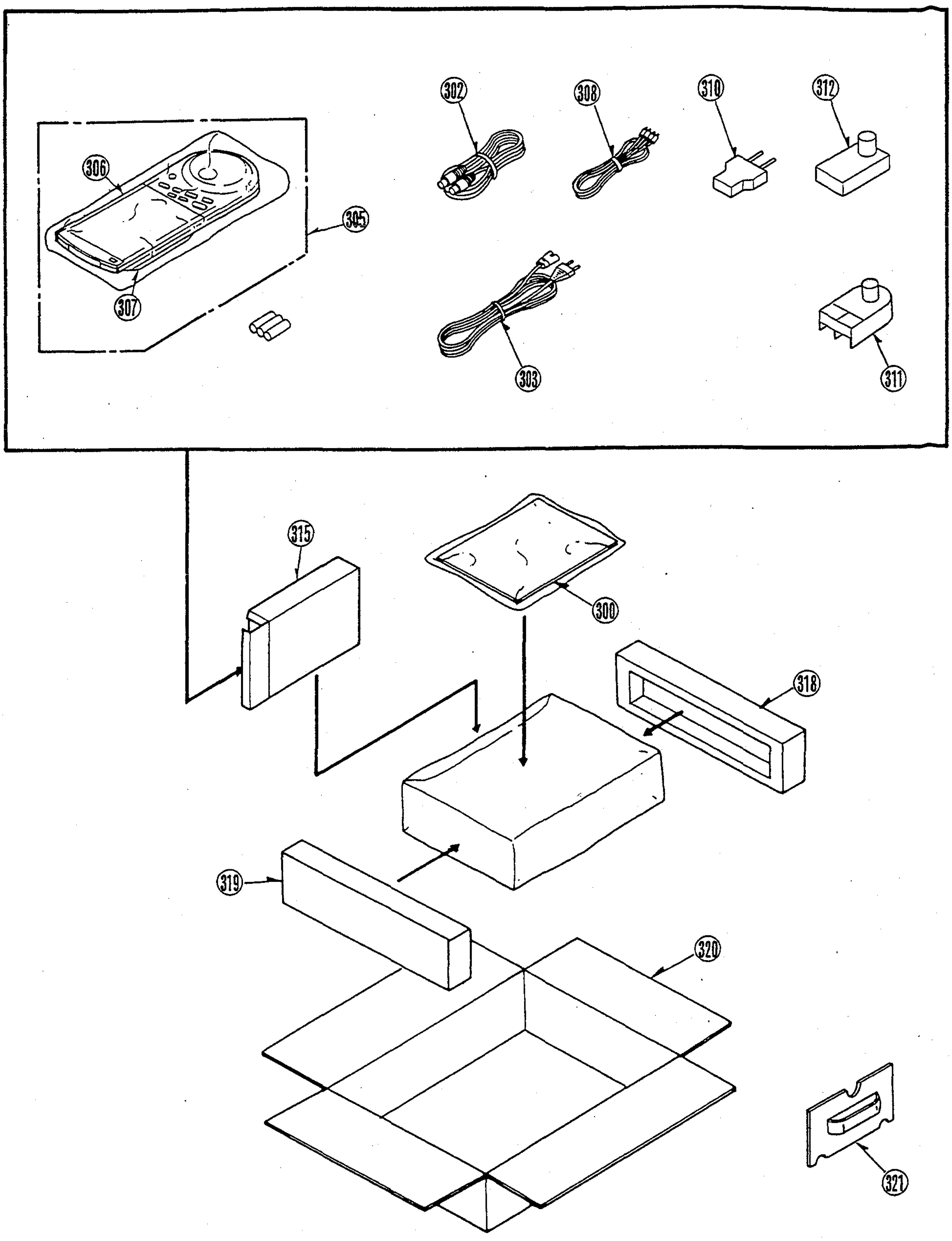
Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
300(4)	VQT5159	OPERATING INSTRUCTIONS	1	<!>NV-HD100AM
		(ENGLISH/ARABIC)		
300(4)	VQT5153	OPERATING INSTRUCTIONS	1	<!>NV-F125BD
		(ENGLISH/CHINESE)		
302(4)	VJA0376	DIN RF CABLE	1	
303(4)	VJA0713	AC CORD	1	<!>NV-HD100AM
303(4)	VJA0667	AC CORD	1	<!>NV-F125BD
304(4)	VJA0231	AUDIO CABLE	1	NV-HD100AM
305(4)	VEQ1502	REMOTE CONTROLLER	1	
306(4)	VGP3346	DOOR PANEL	1	
307(4)	VKF1980	BATTERY COVER	1	
308(4)	VFA0028	AV CABLE	1	NV-F125BD
310(4)	VJP2974	AC PLUG ADAPTOR	1	NV-HD100AM
310(4)	VJS1993	AC PLUG ADAPTOR	1	NV-F125BD
311(4)	VFA0021	MATCHING ADAPTOR	1	NV-F125BD
312(4)	VSQ0662	SEPARATION ADAPTOR	1	
313(4)	VFA0138	MICROPHONE	1	NV-HD100AM
315(4)	VPK1419	ACCESSORIES PACKING	1	NV-HD100AM
315(4)	VPK0834	ACCESSORIES PACKING	1	NV-F125BD
316(4)	VPN3333	ACCESSORIES PAD	1	NV-HD100AM
318(4)	VPN3562	CUSHION (R)	1	NV-HD100AM
318(4)	VPN3555	CUSHION (R)	1	NV-F125BD
319(4)	VPN3563	CUSHION (L)	1	NV-HD100AM
319(4)	VPN3556	CUSHION (L)	1	NV-F125BD
320(4)	VPG6755	PACKING	1	NV-HD100AM
320(4)	VPG6750	PACKING	1	NV-F125BD
321(4)	VPQ0001	HANDLE	1	
		SERVICE FIXTURES & TOOLS		
	VFJ8125H3F	VHS ALIGNMENT TAPE(PAL)	1	
	VFK0335	RETAINING RING REMOVER	1	
		(3mm/4mm)		
	VFK0329	POST ADJUSTMENT SCREWDRIVER	1	
	VFK0326	HEX WRENCH SET	1	
	VFK0132	BACK TENSION METER	1	
	VFK0343	CHECK LIGHT	1	
	VFK27	HEAD CLEANING STICK	1	
	MOR265	MORLYTONE GREASE	1	
	VFK0341	UPPER CYLINDER REMOVER	1	
	VFK0680	WHITE GREASE	1	
	VFK0851	CENTRE FIXING TOOL	1	
	VFK0330	FINE ADJUSTMENT GEAR DRIVER	1	

❹ PACKING PARTS SECTION (NV-HD100AM)



❹ PACKING PARTS SECTION (NV-F125BD)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5-2. ELECTRICAL REPLACEMENT PARTS LIST

Note:1. Be sure to make your orders of replacement parts according to this list.
2. IMPORTANT SAFETY NOTICE : Components identified with the mark <!> have the special characteristics for safety. When replacing any of these components, use only the same type.
3. Unless otherwise specified. All resistors are in OHMS , K-1,000 OHMS. All capacitors are in MICRO-FARADS(uf), P-uuF.
4. The P.C.Board units marked width'■'show below the main assembled parts.
5. The marking(RTL) indicates the retention time is limited for this item. After the discontinuation of this assembly in production, it will no longer be available.

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
		VEP03977C	MAIN C.B.A.	1	(RTL)NV-HD100AM INCLUDING THE TV DEMODULATOR PACK C.B.A.(VEP07723B). LUMINANCE & CHROMINANCE PACK C.B.A.(VEP03975C), HI-Fi AUDIO PACK C.B.A.(VEP04361K), OSD PACK C.B.A. (VEP06853B), DECODER PACK C.B.A. (VEP07725A).
		VEP07723B	TV DEMODULATOR PACK C.B.A.	1	(RTL)NV-HD100AM INCLUDED IN MAIN C.B.A.(VEP03977C).
		VEP03975C	LUMINANCE & CHROMINANCE PACK C.B.A.	1	(RTL)NV-HD100AM INCLUDED IN MAIN C.B.A.(VEP03977C). INDLUDING THE NTSC RECORDING PACK C.B.A.(VEP03888C).
		VEP03888C	NTSC RECORDING PACK C.B.A.	1	(RTL)NV-HD100AM INCLUDED IN LUMINANCE & CHROMINANCE PACK C.B.A.(VEP03975C).
		VEP04361K	Hi-Fi AUDIO PACK C.B.A.	1	(RTL)NV-HD100AM INCLUDED IN MAIN C.B.A.(VEP03977C).
		VEP06853B	OSD PACK C.B.A.	1	(RTL)NV-HD100AM INCLUDED IN MAIN C.B.A.(VEP03977C).
		VEP07725A	DECODER PACK C.B.A.	1	(RTL)NV-HD100AM INCLUDED IN MAIN C.B.A.(VEP03977C).
		VEP03977B	MAIN C.B.A.	1	(RTL)NV-F125BD INCLUDING THE TV DEMODULATOR PACK C.B.A.(VEP07723A), LUMINANCE & CHROMINANCE PACK C.B.A.(VEP03975C), Hi-Fi AUDIO PACK C.B.A.(VEP04361K), OSD PACK C.B.A. (VEP06853B), NICAM DECODER PACK C.B.A.(VEP07675A).
	■	VEP07723A	TV DEMODULATOR PACK C.B.A.		(RTL)NV-F125BD INCLUDED IN MAIN C.B.A.(VEP03977B).
		VEP03975C	LUMINANCE & CHROMINANCE PACK C.B.A.	1	(RTL)NV-F125BD INCLUDED IN MAIN C.B.A.(VEP03977B). INCLUDING THE NTSC RECORDING PACK C.B.A.(VEP03888C).
		VEP03888C	NTSC RECORDING PACK C.B.A.	1	(RTL)NV-F125BD INCLUDED IN LUMINANCE & CHROMINANCE PACK C.B.A.(VEP03975C).
		VEP04361K	Hi-Fi AUDIO PACK C.B.A.	1	(RTL)NV-F125BD INCLUDED IN MAIN C.B.A.(VEP03977B).
		VEP06853B	OSD PACK C.B.A.	1	(RTL)NV-F125BD INCLUDED IN MAIN C.B.A.(VEP03977B).
		VEP07675A	NICAM DECODER PACK C.B.A.	1	(RTL)NV-F125BD INCLUDED IN MAIN C.B.A.(VEP03977B).
		VEP03978A	INPUT/OUTPUT PACK C.B.A.	1	(RTL)
		VEX0126	CYLINDER DRIVE C.B.A.	1	(RTL)
		VEP01487Q	POWER C.B.A.	1	(RTL)<!>NV-HD100AM
		VEP01487P	POWER C.B.A.	1	(RTL)<!>NV-F125BD
		VEP05176C	HEAD AMP C.B.A.	1	(RTL)
		VEP07704C	TIMER C.B.A.	1	(RTL)NV-HD100AM
		VEP07704B	TIMER C.B.A.	1	(RTL)NV-F125BD
		VEP06852C	OPERATION C.B.A.	1	(RTL)NV-HD100AM
		VEP06852B	OPERATION C.B.A.	1	(RTL)NV-F125BD
		VEP04395A	KARAOKE C.B.A.	1	(RTL)
		VEP00S83A	MIC AMP C.B.A	1	(RTL)
		---------	MECHANISM CONNECTION C.B.A.	1	(RTL) NOT SUPPLIED AS C.B.A. (C.B. IS LISTED ON MECHANICAL PARTS LIST)
		VEP00T02A	FE HEAD C.B.A.	1	(RTL)
		---------	MOTOR C.B.A.	1	(RTL) C.B.A. IS INCLUDED IN LOADING MOTOR (1) UNIT. (VEM0427)
		VEP00S86A	POWER TRANSISTOR C.B.A.	1	(RTL)
		ENC17992	RF CONVERTER	1	(RTL)<!>

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
		ENV59845H3	TUNER	1	<!>
F1101		XBA2C16TBO	FUSE	1	<!>
	■	VEP03977C	MAIN C.B.A.		(RTL)NV-HD100AM
			CAPACITORS		
C305		ECUM1H470JCN	C.CAPACITOR CH 50V 47P	1	
C306,07		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	2	
C308		ECEA1EKN4R7	E.CAPACITOR 25V 4.7U	1	
C310		ECEA1CK220	E.CAPACITOR 16V 22U	1	
C311		ECEA0JK101	E.CAPACITOR 6.3V 100U	1	
C312		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C313,14		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C315		ECUM1H560JCN	C.CAPACITOR CH 50V 56P	1	
C319		ECEA0JK101	E.CAPACITOR 6.3V 100U	1	
C320		ECUM1H820JCN	C.CAPACITOR CH 50V 82P	1	
C321		ECUM1H333KBN	C.CAPACITOR CH 50V 0.033U	1	
C601		ECUM1H390JCN	C.CAPACITOR CH 50V 39P	1	
C602		ECRHA060G41	CAPACITOR	1	
C603		ECUM1C105ZFN	C.CAPACITOR 16V 1U	1	
C605		ECUM1H332KBN	C.CAPACITOR CH 50V 3300P	1	
C606		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C607		ECEA0JK221	E.CAPACITOR 6.3V 220U	1	
C608		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C609,10		ECUM1H100DCN	C.CAPACITOR CH 50V 10P	2	
C611		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C614		ECEA1EK3R3	E.CAPACITOR 25V 3.3U	1	
C701,02		ECEA1CK100	E.CAPACITOR 16V 10U	2	
C705		ECEA1CK220	E.CAPACITOR 16V 22U	1	
C706		ECQV1H104JZ	P.CAPACITOR 50V 0.1U	1	
C707		ECEA1HKR47	E.CAPACITOR 50V 0.47U	1	
C708		ECEA1CK220	E.CAPACITOR 16V 22U	1	
C709		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C710		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C711		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C712		ECQB1H822JH	P.CAPACITOR 50V 8200P	1	
C713		ECQV1H333JZ	P.CAPACITOR 50V 0.033U	1	
C714		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C715		ECUM1H151JCN	C.CAPACITOR CH 50V 150P	1	
C716		ECUM1H331JCN	C.CAPACITOR CH 50V 330P	1	
C717		ECEA1HK0R1	E.CAPACITOR 50V 0.1U	1	
C718-20		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	3	
C721		ECEA1CK470	E.CAPACITOR 16V 47U	1	
C722		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C723		ECUM1H120JCN	C.CAPACITOR CH 50V 12P	1	
C724		ECUM1H470JPN	C.CAPACITOR CH 50V 47P	1	
C725		ECQV1H473JZ	P.CAPACITOR 50V 0.047U	1	
C726		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C727		ECUM1H270JCN	C.CAPACITOR CH 50V 27P	1	
C728		ECEA1HKR47	E.CAPACITOR 50V 0.47U	1	
C729		ECUX1H390JCV	C.CAPACITOR CH 50V 39P	1	
C730-32		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	3	
C733		ECEA1HK2R2	E.CAPACITOR 50V 2.2U	1	
C734		ECQV1H104JZ	P.CAPACITOR 50V 0.1U	1	
C735		ECEA1CK470	E.CAPACITOR 16V 47U	1	
C736-42		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	7	
C752		ECUX1H820JCV	C.CAPACITOR CH 50V 82P	1	
C754,55		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	2	
C756		ECEA1CK470	E.CAPACITOR 16V 47U	1	
C757		ECUX1H470JCV	C.CAPACITOR 50V 47P	1	
C758,59		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	2	
C760		ECEA1HK0R1	E.CAPACITOR 50V 0.1U	1	
C761		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C762		ECEA1CK100	E.CAPACITOR 16V 10U	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C763-67		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	5	
C790		ECUX1H100DCV	C.CAPACITOR 50V 10P	1	
C796		ECUX1H150JCV	C.CAPACITOR 50V 15P	1	
C797-99		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	3	
C805		ECEA0JK221	E.CAPACITOR 6.3V 220U	1	
C806		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C807		ECUM1H181JCN	C.CAPACITOR CH 50V 180P	1	
C808		ECUM1H270JCN	C.CAPACITOR CH 50V 27P	1	
C809		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C812-14		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	3	
C815		ECUM1H560JCN	C.CAPACITOR CH 50V 56P	1	
C816		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C817		ECUM1H560JCN	C.CAPACITOR CH 50V 56P	1	
C818		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C819		ECUM1H470JCN	C.CAPACITOR CH 50V 47P	1	
C820-25		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	6	
C826		ECEA0JK101	E.CAPACITOR 6.3V 100U	1	
C827		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C828		ECUM1H470JCN	C.CAPACITOR CH 50V 47P	1	
C829		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C830		ECEA1HK0R1	E.CAPACITOR 50V 0.1U	1	
C831		ECQB1H332JH	P.CAPACITOR 50V 0.27U	1	
C832		ECUM1H331JCN	C.CAPACITOR CH 50V 330P	1	
C838		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C839		ECUM1H100DCN	C.CAPACITOR CH 50V 10P	1	
C841		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C842		ECEA0JK101	E.CAPACITOR 6.3V 100U	1	
C843		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C845		ECEA1HK010	E.CAPACITOR 50V 1U	1	
C846		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C848-50		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	3	
C1001		ECA1EM101	E.CAPACITOR 25V 100U	1	
C1002		ECEA1CK330	E.CAPACITOR 16V 33U	1	
C1003		ECEA0JK330	E.CAPACITOR 6.3V 33U	1	
C1004		ECA0JM471	E.CPAACITOR 6.3V 470U	1	
C1005		ECEA1APZ221	E.CAPACITOR 10V 220U	1	
C2001-03		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	3	
C2004-06		ECEA1CK470	E.CAPACITOR 16V 47U	3	
C2007		ECEA1HK010	E.CAPACITOR 50V 1U	1	
C2008		ECA0JM221	E.CAPACITOR 6.3V 220U	1	
C2009		ECEA1HKR22	E.CAPACITOR 50V 0.22U	1	
C2010,11		VCUV1H333KBN	C.CAPACITOR 50V 0.033U	2	
C2012		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C2013		ECQV1H683JZ	P.CAPACITOR 50V 0.068U	1	
C2014		ECA1CM101	E.CAPACITOR 16V 100U	1	
C2015-18		VCUV1H333KBN	C.CAPACITOR 50V 0.033U	4	
C2019-21		ECEA1HK2R2	E.CAPACITOR 50V 2.2U	3	
C2027		ECUM1H222KBN	C.CAPACITOR CH 50V 2200P	1	
C2028		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C2029		ECEA1HK3R3	E.CAPACITOR 50V 3.3U	1	
C2030		ECEA1HKN3R3	E.CAPACITOR 50V 3.3U	1	
C2031		ECUM1H471JCN	C.CAPACITOR 50V 470P	1	
C2032		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C2033		ECEA1HK3R3	E.CAPACITOR 50V 3.3U	1	
C2034		ECEA0JK220	E.CAPACITOR 6.3V 22U	1	
C2035		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C2036		ECUM1H222KBN	C.CAPACITOR CH 50V 2200P	1	
C2037		ECA0JM221	E.CAPACITOR 6.3V 220U	1	
C2038		ECQV1H334JZ	P.CAPACITOR 50V 0.33U	1	
C2039		ECEA1HKNR47	E.CAPACITOR 50V 0.47U	1	
C2040		ECUM1H680JCN	C.CAPACITOR CH 50V 68P	1	
C2041,42		ECUM1C105ZFN	C.CAPACITOR 16V 1U	2	
C2043		ECUM1H392KBN	C.CAPACITOR CH 50V 3900P	1	
C2044		ECUM1H223KBN	C.CAPACITOR CH 50V 0.022U	1	
C2045		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C2046		ECUM1H680JCN	C.CAPACITOR CH 50V 68P	1	
C2047		ECEA1HKNR47	E.CAPACITOR 50V 0.47U	1	
C2048		ECA0JM221	E.CAPACITOR 6.3V 220U	1	
C2049		ECEA1HK4R7	E.CAPACITOR 50V 4.7U	1	
C2050		ECUM1H101JCN	C.CAPACITOR CH 50V 100P	1	
C2051		ECQV1H683JZ	P.CAPACITOR 50V 0.068U	1	
C2052		ECEA1HKR47	E.CAPACITOR 50V 0.47U	1	
C2053		ECEA1CK470	E.CAPACITOR 16V 47U	1	
C2055		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C2056		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C3002,03		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	2	
C3004		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C3008		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3009		ECUM1C105ZFN	C.CAPACITOR 16V 1U	1	
C3011		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3012		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3013		ECEA0JK221	E.CAPACITOR 6.3V 220U	1	
C3014		ECUM1H560JCN	C.CAPACITOR CH 50V 56P	1	
C3015		ECUM1H080DCN	C.CAPACITOR CH 50V 8P	1	
C3016,17		ECUM1H180JCN	C.CAPACITOR CH 50V 18P	2	
C3018		ECUM1H181JCN	C.CAPACITOR CH 50V 180P	1	
C3020		ECUM1H151JCN	C.CAPACITOR CH 50V 150P	1	
C3021		ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C3022		ECUM1H180JCN	C.CAPACITOR CH 50V 18P	1	
C3023		ECUM1H330JCN	C.CAPACITOR CH 50V 33P	1	
C3024		ECUM1H681JCN	C.CAPACITOR CH 50V 680P	1	
C3026		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3027		ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C3028		ECUM1H680JCN	C.CAPACITOR CH 50V 68P	1	
C3030		ECUM1H181JCN	C.CAPACITOR CH 50V 180P	1	
C3031		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3032		ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C3033		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3034		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C3035		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C3038		ECEA1CK470	E.CAPACITOR 16V 47U	1	
C3040		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3043		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3044		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C3045,46		ECEA1AK220	E.CAPACITOR 10V 22U	2	
C3047		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3048		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C3049		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C4001		ECA0JM471	E.CPAACITOR 6.3V 470U	1	
C4002,03		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	2	
C4004		ECEA1CPZ101	E.CAPACITOR 16V 100U	1	
C4005		ECUM1C224ZFN	C.CAPACITOR CH 16V 0.22U	1	
C4006		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C4007		ECEA1CPZ101	E.CAPACITOR 16V 100U	1	
C4008		ECUM1C224ZFN	C.CAPACITOR CH 16V 0.22U	1	
C4009		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C4010		ECEA1CK470	E.CAPACITOR 16V 47U	1	
C4011		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C4012		ECQB1H103KZ	P.CAPACITOR 50V 0.01U	1	
C4013		ECQP1222JZ	P.CAPACITOR 0.0022U	1	
C4014		ECKD2H331KB	C.CAPACITOR 500V 330P	1	
C4015		ECQB1H102KZ	P.CAPACITOR 50V 1000P	1	
C4016		ECEA16M33	E.CAPACITOR 16V 33U	1	
C4019		ECEA0JK220	E.CAPACITOR 6.3V 22U	1	
C4020		ECUM1H222KBN	C.CAPACITOR CH 50V 2200P	1	
C4021		ECUM1H683ZFN	C.CAPACITOR CH 50V 0.068U	1	
C4022		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C4023		ECUM1H471JCN	C.CAPACITOR 50V 470P	1	
C4025		ECEA1HK010	E.CAPACITOR 50V 1U	1	
C4027		ECEA0JK220	E.CAPACITOR 6.3V 22U	1	
C4028		ECEA1EK4R7	E.CAPACITOR 25V 4.7U	1	
C4029		ECUM1H182JN	C.CAPACITOR CH 50V 1800P	1	
C4030		ECUM1H561JCN	C.CAPACITOR CH 50V 560P	1	
C4503		ECUX1H152KBV	C.CAPACITOR CH 50V 1500P	1	
C4504,05		ECEA1CPZ470	E.CAPACITOR 16V 47U	2	
C4506		VCEA1CAH100	E.CAPACITOR 16V 10U .	1	
C4507		ECQB1H223JA	P.CAPACITOR 50V 0.022U	1	
C4508		ECEA1EBZ4R7	E.CAPACITOR 25V 4.7U	1	
C4509		ECEA1APZ470	E.CAPACITOR 10V 47U	1	
C4510		ECQB1H103JA	P.CAPACITOR 50V 0.01U	1	
C4511		ECQB1H332JA	P.CAPACITOR 50V 3300P	1	
C4512		ECUX1H561JV	C.CAPACITOR CH 50V 560P	1	
C4513		ECUM1H681JN	C.CAPACITOR CH 50V 680P	1	
C4514		ECUM1H561JN	C.CAPACITOR CH 50V 560P	1	
C4515		VCEA1EAH4R7	E.CAPACITOR 25V 4.7U	1	
C4517		ECEA1APZ101	E.CAPACITOR 10V 100U	1	
C4518		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C4521		ECUM1C473KBV	C.CAPACITOR CH 16V 0.047U	1	
C4524		VCEA1AAC101	E.CAPACITOR 10V 100U	1	
C4528		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C4530		ECEA0JPK221	E.CAPACITOR 6.3V 220U	1	
C4533		ECEA1CPZ330	E.CAPACITOR 16V 33U	1	
C4537		ECUM1H102JCN	C.CAPACITOR CH 50V 1000P	1	
C4538		ECEA1HUR47	E.CAPACITOR 50V 0.47U	1	
C4539		ECUM1C224ZFN	C.CAPACITOR CH 16V 0.22U	1	
C4541		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C4545		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C4556		VCEA1CAH100	E.CAPACITOR 16V 10U	1	
C4557		ECQB1H223JA	P.CAPACITOR 50V 0.022U	1	
C4558		ECEA1EBZ4R7	E.CAPACITOR 25V 4.7U	1	
C4559		ECEA1APZ470	E.CAPACITOR 10V 47U	1	
C4560		ECQB1H103JA	P.CAPACITOR 50V 0.01U	1	
C4561		ECQB1H332JA	P.CAPACITOR 50V 3300P	1	
C4562		ECUM1H561JN	C.CAPACITOR CH 50V 560P	1	
C4563		ECUM1H681JN	C.CAPACITOR CH 50V 680P	1	
C4564		ECUM1H561JN	C.CAPACITOR CH 50V 560P	1	
C4565		VCEA1EAH4R7	E.CAPACITOR 25V 4.7U	1	
C4567		ECEA1APZ101	E.CAPACITOR 10V 100U	1	
C4568		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C4576		ECUM1E473KBN	C.CAPACITOR CH 25V 0.047U	1	
C4583		ECEA1CPZ330	E.CAPACITOR 16V 33U	1	
C4585,86		ECEA1APZ101	E.CAPACITOR 10V 100U	2	
C4591		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C4592		ECUX1H152KBV	C.CAPACITOR CH 50V 1500P	1	
C4606		VCEA0JAC470	E.CAPACITOR 6.3V 47U	1	
C4611		ECQB1H103JH	P.CAPACITOR 50V 0.01U	1	
C4616		ECUX1H101JCV	C.CAPACITOR CH 50V 100P	1	
C4617		ECEA10M22	E.CAPACITOR 10V 22U	1	
C4618		ECQB1H822JH	P.CAPACITOR 50V 8200P	1	
C4619		ECEA1APB100	E.CAPACITOR 10V 10U	1	
C4621		ECEA0JPK221	E.CAPACITOR 6.3V 220U	1	
C4629		ECQB1H103JZ	P.CAPACITOR 50V 0.01U	1	
C4636		ECUM1H471JN	C.CAPACITOR CH 50V 470P	1	
C4638		ECQB1H822JH	P.CAPACITOR 50V 8200P	1	
C4652,53		ECUM1C105ZFN	C.CAPACITOR 16V 1U	2	
C6001		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C6002		ECUM1H221JCN	C.CAPACITOR CH 50V 220P	1	
C6003		ECUM1H223KBN	C.CAPACITOR CH 50V 0.022U	1	
C6004		ECUM1H472KBN	C.CAPACITOR CH 50V 4700P	1	
C6005		ECUM1H392KBN	C.CAPACITOR CH 50V 3900P	1	
C6006		ECUM1H332KBN	C.CAPACITOR CH 50V 3300P	1	
C6007		ECEA0JK220	E.CAPACITOR 6.3V 22U	1	
C6008		ECUM1H180JCN	C.CAPACITOR CH 50V 18P	1	
C6009		ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C6010		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C6011		ECEA0JK220	E.CAPACITOR 6.3V 22U	1	
C6012		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C6013		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C6014,15		ECUM1H271JCN	C.CAPACITOR CH 50V 270P	2	
C6016,17		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C6018		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C6019		ECEA0JK330	E.CAPACITOR 6.3V 33U	1	
C6020		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C6021		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C7002-05		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	4	
C7006		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C7007,08		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C7009		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C7010		ECEA0JK101	E.CAPACITOR 6.3V 100U	1	
C7011		EECS5R5T224N	E.CAPACITOR 5.5V 0.22U	1	
C7012		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C7013		ECEA0JK221	E.CAPACITOR 6.3V 220U	1	
C7017		ECEA1ASN100	E.CAPACITOR 10V 10U	1	
C7018-20		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	3	
C7021,22		ECUM1H332KBN	C.CAPACITOR CH 50V 3300P	2	
C7023		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C7302		ECEA1CKN100	E.CAPACITOR 16V 10U	1	
C7303		ECQV1H393JZ	P.CAPACITOR 50V 0.039U	1	
C7304		ECEA1CKN100	E.CAPACITOR 16V 10U	1	
C7305		ECQV1H473JZ	P.CAPACITOR 50V 0.047U	1	
C7306		ECQB1H102KZ	P.CAPACITOR 50V 1000P	1	
C7307		ECQB1H822KZ	P.CAPACITOR 50V 8200P	1	
C7308		ECQB1H102KZ	P.CAPACITOR 50V 1000P	1	
C7309		ECQB1H152KZ	F.CAPACITOR 50V 1500P	1	
C7310		ECEA1CK100	E.CAPACITOR 16V 10U	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C7311		ECEA1HKR47	E.CAPACITOR 50V 0.47U	1	
C7312		ECQV1H224JZ	P.CAPACITOR 50V 0.22U	1	
C7313		ECQV1H104JZ	P.CAPACITOR 50V 0.1U	1	
C7314		ECQV1H224JZ	P.CAPACITOR 50V 0.22U	1	
C7315		ECQV1H104JZ	P.CAPACITOR 50V 0.1U	1	
C7316		ECQV1H224JZ	P.CAPACITOR 50V 0.22U	1	
C7317		ECEA1CK101	E.CAPACITOR 16V 100U	1	
C7318		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C7319		ECEA1CK470	E.CAPACITOR 16V 47U	1	
C7320,21		ECEA1CK100	E.CAPACITOR 16V 10U	2	
C7323,24		ECQV1H393JZ	P.CAPACITOR 50V 0.039U	2	
C7331		ECQV1H474JZ	P.CAPACITOR 50V 0.47U	1	
C7332,33		ECUX1H102KBV	C.CAPACITOR 50V 1000P	2	
C7334		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C7335		ECEA1CK470	E.CAPACITOR 16V 47U	1	
C7336		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C7337		ECUX1H680JCV	C.CAPACITOR 50V 68P	1	
C7339		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C7340		ECUM1H390JPN	C.CAPACITOR CH 50V 39P	1	
C7341		ECUX1H070DCV	C.CAPACITOR 50V 7P	1	
C7343		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C7345		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C7346		ECUM1H390JPN	C.CAPACITOR CH 50V 39P	1	
C7347		ECUX1H070DCV	C.CAPACITOR 50V 7P	1	
C7348		ECQV1H393JZ	P.CAPACITOR 50V 0.039U	1	
C7349,50		ECUX1H221JCV	C.CAPACITOR CH 50V 220P	2	
C7351,52		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	2	
C7353		ECEA1CK470	E.CAPACITOR 16V 47U	1	
C7354		ECEA1CK220	E.CAPACITOR 16V 22U	1	
C7355		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C7356		ECEA1CKN100	E.CAPACITOR 16V 10U	1	
C7357		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C7661		ECUM1H104KBM	C.CAPACITOR CH 50V 0.1U	1	
C7662		ECUM1H683KBM	C.CAPACITOR CH 50V 0.068U	1	
C7663		ECUM1H823KBM	C.CAPACITOR CH 50V 0.082U	1	
C7664		ECUM1H273KBM	C.CAPACITOR CH 50V 0.027U	1	
C7665,66		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	2	
C7667		ECEA1HKA100	E.CAPACITOR 50V 10U	1	
C7670,71		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	2	
C7673		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C7675		ECEA1HKN010	E.CAPACITOR 50V 1U	1	
C7676,77		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	2	
C7679		ECEA1HKN010	E.CAPACITOR 50V 1U	1	
C7681		ECEA1CK220	E.CAPACITOR 16V 22U	1	
C8001		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C8001		ECUM1C474ZFN	C.CAPACITOR 16V 0.47U	1	
C8002-04		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	3	
C8006		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C8007		ECEA1AKS330	E.CAPACITOR 10V 33U	1	
C8008		ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C8009		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C8010-12		ECEA1AKS330	E.CAPACITOR 10V 33U	3	
C8013		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C8014		ECUM1H561KBN	C.CAPACITOR CH 50V 560P	1	
C8015		ECUM1H221JCN	C.CAPACITOR CH 50V 220P	1	
C8019		ECUM1H680JCN	C.CAPACITOR CH 50V 68P	1	
C8020		ECUM1H470JCN	C.CAPACITOR CH 50V 47P	1	
			DIODES		
D302		1SS283	DIODE	1	
D303		MA151A	DIODE	1	
D304		1SS254	DIODE	1	
D601,02		1SS254	DIODE	2	
D603		MA151K	DIODE	1	
D701-07		MA77	DIODE	7	
D708		MA3100L	DIODE	1	
D709		MA77	DIODE	1	
D771		MA141WK	DIODE	1	
D772,73		MA141K	DIODE	2	
D801,02		1SS254	DIODE	2	
D804		1SS254	DIODE	1	
D1001-03		11ES1	DIODE	3	
D1004		MA723VT	DIODE	1	(VT)
D2001		MA723VT	DIODE	1	(VT)
D2003		1SS254	DIODE	1	
D2005-08		1SS254	DIODE	4	
D2011		1SS254	DIODE	1	
D3001		1SS254	DIODE	1	
D3002		11EQS04	DIODE	1	
D3005		MA151K	DIODE	1	
D3007		1SS254	DIODE	1	
D3008		MA221	DIODE	1	
D4001,02		1SS254	DIODE	2	
D4003		MA151WK	DIODE	1	
D4006		1SS254	DIODE	1	
D4007		MA723VT	DIODE	1	(VT)
D4501,02		MA151H	DIODE	2	
D4503		MA151K	DIODE	1	
D4504		MA151H	DIODE	1	
D4602		MA151K	DIODE	1	
D6001-05		1SS254	DIODE	5	
D6007		1SS254	DIODE	1	
D6008,09		MA723VT	DIODE	2	(VT)
D6011		1SS254	DIODE	1	
D6012		SV03YS	DIODE	1	
D7001-04		MA723VT	DIODE	4	(VT)
D7005		1SS254	DIODE	1	
D7007		1SS254	DIODE	1	
D7009		MA151WK	DIODE	1	
D7011		MA151WK	DIODE	1	
D7013		1SS254	DIODE	1	
D7014		MA151K	DIODE	1	
D7015-19		1SS254	DIODE	5	
D7304		MA3100L	DIODE	1	
D7601		MA141K	DIODE	1	
D7602		MA3082M	DIODE	1	
			DELAYS		
DL801		VLD0198	DELAY	1	
			FILTERS		
FL8001		VLF0936	FILTER	1	
FL8002		ELB4L149	FILTER	1	
			INTEGRATED CIRCUITS		
IC301		VEFH29B	IC	1	
IC601		M35010-055SP	IC	1	
IC602		M37471-V1AV	IC	1	
IC603		TA75S393F	IC	1	
IC701		LA7577	IC	1	
IC702		LA7975	IC	1	
IC801		NJM2233BMA	IC	1	
IC802		M52352FP	IC	1	
IC2001		BA6219B	IC	1	
IC2002		AN3727S	IC	1	
IC2003		XRA6439P	IC	1	
IC2005		UPC358G2	IC	1	
IC3001		NJM2233BMA	IC	1	
IC4501		XLH7770KS	IC	1	
IC4601		BA7755AF	IC	1	
IC6001		MN67434VRSA	IC	1	
IC6009		UPC358G2	IC	1	
IC7001		M66006FP	IC	1	
IC7301		TDA3803A	IC	1	
IC7302		TA8721SN	IC	1	
IC7303		TC4W66F	IC	1	
IC7652		AN5043SC	IC	1	
IC8001		BA7049FS	IC	1	
			COILS		
L303		ELESQ220KA	COIL 22UH	1	
L304		ELESQ101KA	COIL 100UH	1	
L305		ELESP121JA	COIL 120UH	1	
L306		ELESQ390KA	COIL 39UH	1	
L601		ELESQ101KA	COIL 100UH	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
L602		ELESQ150KA	COIL 15UH	1	
L701		ELESQ680KA	COIL 68UH	1	
L711		ELJNAR39KF	COIL 0.39UH	1	
L712-16		ELJFA151KB	COIL 150UH	5	
L718		ELJNA1R0JF	COIL 1UH	1	
L719		ELESQ5R6KA	COIL 5.6UH	1	
L721		ELJFA151KB	COIL 150UH	1	
L723		ELJFA151KB	COIL 150UH	1	
L724		ELJNAR27KF	COIL 0.27UH	1	
L751		ELJFA100KB	COIL 10UH	1	
L752		ELESQ270KA	COIL 27UH	1	
L770		ELESQ680KA	COIL 68UH	1	
L803		ELESQ220KA	COIL 22UH	1	
L804		ELESQ101KA	COIL 100UH	1	
L805		ELESQ270KA	COIL 27UH	1	
L807,08		VLQ0540J150	COIL 15UH	2	
L809		ELESQ101KA	COIL 100UH	1	
L811,12		ELESQ101KA	COIL 100UH	2	
L1001		VLP0074	COIL	1	
L2001		VLP0083	FILTER	1	
L2002		VLQ0188J330	COIL 33UH	1	
L2003		ELESQ102KA	COIL 1000UH	1	
L2004		ELESQ101KA	COIL 100UH	1	
L2005		VLP0074	COIL	1	
L2006		VLQ0188J330	COIL 33UH	1	
L3001		VLQ0188J330	COIL 33UH	1	
L3002		ELESQ680JA	COIL 68UH	1	
L3004		VLQ0188J330	COIL 33UH	1	
L3005		ELESQ270JA	COIL 27UH	1	
L3007		ELESQ6R8JA	COIL 6.8UH	1	
L3008		ELESQ5R6JA	COIL 5.6UH	1	
L3009		ELESQ120JA	COIL 12UH	1	
L3010		ELESQ101JA	COIL 100UH	1	
L3011		VLQ0188J330	COIL 33UH	1	
L3012		ELESQ151KA	COIL 150UH	1	
L3013		ELESQ820JA	COIL 82UH	1	
L4001,02		VLQEL06F101K	COIL 100UH	2	
L4003		ELESQ471KA	COIL 470UH	1	
L4004		VLQ0188J330	COIL 33UH	1	
L4501,02		ELESQ101KA	COIL 100UH	2	
L4601		VLQEL07F153J	COIL 15MH	1	
L6001		VLP0074	COIL	1	
L7001,02		ELESQ1R0KA	COIL 1UH	2	
L7003		VLQ0188J330	COIL 33UH	1	
L7004		VLQ0540J330	COIL 33UH	1	
L7007		VLQ0188J330	COIL 33UH	1	
L7010		VLQEL06F101K	COIL 100UH	1	
L7012		VLQ0555	COIL	1	
L7301		ELESQ102KA	COIL 1000UH	1	
L8002		ELESQ101KA	COIL 100UH	1	
L8003		ELESQ221KA	COIL 220UH	1	
L8004		VLQ0188J470	COIL 47UH	1	
			CONNECTORS		
P1001		VJP1144	CONNECTOR (MALE) 6P	1	
P1001		VJS1144	CONNECTOR (FEMALE) 6P	1	
P1002		VJP1141	CONNECTOR (MALE) 2P	1	
P1002		VJS1141	CONNECTOR (FEMALE) 2P	1	
P1003		VJP1232	CONNECTOR (MALE) 5P	1	
P1003		VJS1232	CONNECTOR (FEMALE) 5P	1	
P1102		VJS1237T	CONNECTOR (FEMALE) 10P	1	
P1506		VJS1230	CONNECTOR (FEMALE) 3P	1	
P1509		VJS1141	CONNECTOR (FEMALE) 2P	1	
P2001		VJP1232T	CONNECTOR (MALE) 5P	1	
P2001		VJS1232	CONNECTOR (FEMALE) 5P	1	
P2002		VJP1230T	CONNECTOR (MALE) 3P	1	
P2002		VJS1230	CONNECTOR (FEMALE) 3P	1	
P2003		VJS3193A015A	CONNECTOR (FEMALE) 15P	1	
P2902		VJS1232	CONNECTOR (FEMALE) 5P	1	
P3001		VJS3193A020A	CONNECTOR (FEMALE)	1	
P4002		VJP1230T	CONNECTOR (MALE) 3P	1	
P4002		VJS1230	CONNECTOR (FEMALE) 3P	1	
P4003		VJS2331	CONNECTOR (FEMALE) 6P	1	
P4012		VJP3092	CONNECTOR (MALE) 12P	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
P4012		VJS3080	CONNECTOR (FEMALE) 12P	1	
P4014		VJP1932T	CONNECTOR (MALE) 15P	1	
P4014		VJS1932	CONNECTOR (FEMALE) 15P	1	
P4301		VJS3080	CONNECTOR (FEMALE) 12P	1	
P4305		VJS1932	CONNECTOR (FEMALE) 15P	1	
P6001		VJS3193A013A	CONNECTOR (FEMALE)	1	
P6002		VJP1242T	CONNECTOR (MALE) 2P	1	
P6005		VJP1239T	CONNECTOR (MALE) 12P	1	
P6005		VJS1239	CONNECTOR (FEMALE) 12P	1	
P6501		VJS1239	CONNECTOR (FEMALE) 12P	1	
P7401		VJS3193A012A	CONNECTOR (FEMALE)	1	
P7402		VJS3193A024A	CONNECTOR (FEMALE)	1	
PP601		VJP3043A006W	CONNECTOR (MALE) 6P	1	
PP801		VJP3043A005W	CONNECTOR (MALE) 5P	1	
PP802		VJP3043G003W	CONNECTOR (MALE)	1	
PP803		VJP3043G007W	CONNECTOR (MALE)	1	
PP3001		VJP3044G009W	CONNECTOR (MALE)	1	
PP3002		VJP3044G012W	CONNECTOR (MALE)	1	
PP3003		VJP3044G006W	CONNECTOR (MALE)	1	
PP3005		VJP3042A016W	CONNECTOR (MALE)	1	
PP3006		VJP3042G017W	CONNECTOR (MALE)	1	
PP4001-03		VJP3186A018	CONNECTOR (MALE)	3	
PP7401-03		VJP3043A005W	CONNECTOR (MALE) 5P	3	
PP7404		VJP3043G007W	CONNECTOR (MALE)	1	
PP7405		VJP3043A006W	CONNECTOR (MALE) 6P	1	
PP7406		VJP3043G012W	CONNECTOR (MALE)	1	
PS301		VJS3044F009W	CONNECTOR (FEMALE)	1	
PS302		VJS3044F012W	CONNECTOR (FEMALE)	1	
PS303		VJS3044F006W	CONNECTOR (FEMALE)	1	
PS601		VJS3043B006W	CONNECTOR (FEMALE) 6P	1	
PS602		VJS3043F012W	CONNECTOR (FEMALE)	1	
PS701-03		VJS3043B005W	CONNECTOR (FEMALE) 5P	3	
PS704		VJS3043F007W	CONNECTOR (FEMALE)	1	
PS801		VJS3043B005W	CONNECTOR (FEMALE) 5P	1	
PS802		VJS3043F003W	CONNECTOR (FEMALE)	1	
PS803		VJS3043F007W	CONNECTOR (FEMALE)	1	
PS4001-03		VJS3186B018	CONNECTOR (FEMALE)	3	
PS7301,02		VJR0477	PACK PIN	2	
			TRANSISTORS		
Q601		MSB709	TRANSISTOR	1	
Q703		MSD601-S	TRANSISTOR	1	
Q712		2SD1996-R	TRANSISTOR	1	
Q713		2SD1979-S	TRANSISTOR	1	
Q714		2SB1218-QR	TRANSISTOR	1	
Q715		2SD1820	TRANSISTOR	1	
Q716		2SC3931-C	TRANSISTOR	1	
Q717		2SC2377	TRANSISTOR	1	
Q771		MSD601-S	TRANSISTOR	1	
Q2001		MSB709	TRANSISTOR	1	
Q3001		MSB709	TRANSISTOR	1	
Q3002		MSC2295	TRANSISTOR	1	
Q3003		MSB709	TRANSISTOR	1	
Q3004		MSC2295	TRANSISTOR	1	
Q3006		MSC2295	TRANSISTOR	1	
Q3007		MSD601	TRANSISTOR-RESISTOR	1	
Q3009		MSD601	TRANSISTOR-RESISTOR	1	
Q3010		2SB710-R	TRANSISTOR	1	(R,S)
Q4001		2SB710-R	TRANSISTOR	1	(R,S)
Q4002		2SB1321-R	TRANSISTOR	1	(R,S)
Q4003		2SD602A-R	TRANSISTOR	1	
Q4004,05		MSD601	TRANSISTOR-RESISTOR	2	
Q4006		MSB709	TRANSISTOR	1	
Q4007		2SB1378-R	TRANSISTOR	1	
Q4008		2SB1321-R	TRANSISTOR	1	(R,S)
Q4009		MSD601	TRANSISTOR-RESISTOR	1	
Q4501		2SD655	TRANSISTOR	1	
Q4551		2SB561	TRANSISTOR	1	
Q4601		MSD1328	TRANSISTOR	1	
Q6001		MSD601	TRANSISTOR-RESISTOR	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
Q6002		2SD1991A	TRANSISTOR	1	
Q6003		MSB709	TRANSISTOR	1	
Q6004		2SD655	TRANSISTOR	1	
Q6005		MSD601	TRANSISTOR-RESISTOR	1	
Q6006		MSB709	TRANSISTOR	1	
Q7301		2SD1820-S	TRANSISTOR	1	
Q7304		2SD1820	TRANSISTOR	1	
Q7305		MSD601	TRANSISTOR-RESISTOR	1	
Q7306		2SC2404-C	TRANSISTOR CHIP	1	(C,D)
Q8001		MSD601	TRANSISTOR-RESISTOR	1	
			COMBINATION PARTS		
QR303		MRN2404	TRANSISTOR-RESISTOR	1	
QR306		MRN1404	TRANSISTOR-RESISTOR	1	
QR601		XN4312	TRANSISTOR-TRANSISTOR	1	
QR701-03		UN5213	TRANSISTOR	3	
QR704,05		XN4212	TRANSISTOR-RESISTOR	2	
QR706		UN5212	TRANSISTOR-RESISTOR	1	
QR707-09		XN4213	TRANSISTOR-RESISTOR	3	
QR711,12		UN5213	TRANSISTOR	2	
QR715		UN5213	TRANSISTOR	1	
QR717		UN5213	TRANSISTOR	1	
QR804		MRN2404	TRANSISTOR-RESISTOR	1	
QR805,06		MRN1404	TRANSISTOR-RESISTOR	2	
QR1001		XN1211	DIGITAL TRANSISTOR	1	
QR2001		XN1213	TRANSISTOR-TRANSISTOR	1	
QR2002		MRN2404	TRANSISTOR-RESISTOR	1	
QR3001		MRN2402	TRANSISTOR-RESISTOR	1	
QR3002		DTC363EK	COMBI.TR-R	1	
QR3005		MRN1403	TRANSISTOR-RESISTOR	1	
QR3006		MRN2402	TRANSISTOR-RESISTOR	1	
QR3007		DTC363EK	COMBI.TR-R	1	
QR4001		DTC363EK	COMBI.TR-R	1	
QR4002		XN1111	DIGITAL TRANSISTOR	1	
QR4005		MRN1404	TRANSISTOR-RESISTOR	1	
QR4007		MRN1404	TRANSISTOR-RESISTOR	1	
QR4008		XN4312	TRANSISTOR-TRANSISTOR	1	
QR4010		XN1211	DIGITAL TRANSISTOR	1	
QR4012		MRN2404	TRANSISTOR-RESISTOR	1	
QR4508,09		MRN2404	TRANSISTOR-RESISTOR	2	
QR4510		MRN1403	TRANSISTOR-RESISTOR	1	
QR4602		MRN2402	TRANSISTOR-RESISTOR	1	
QR4603		MRN1404	TRANSISTOR-RESISTOR	1	
QR6002		MRN1404	TRANSISTOR-RESISTOR	1	
QR6003		XN1211	DIGITAL TRANSISTOR	1	
QR6004		UN2114	TRANSISTOR-RESISTOR	1	
QR6005		MRN1404	TRANSISTOR-RESISTOR	1	
QR6010,11		MRN1404	TRANSISTOR-RESISTOR	2	
QR7003,04		MRN1404	TRANSISTOR-RESISTOR	2	
QR7005		MRN1403	TRANSISTOR-RESISTOR	1	
QR7006		MRN2402	TRANSISTOR-RESISTOR	1	
QR7301,02		UN5213	TRANSISTOR	2	
QR7312-14		UN5211	TRANSISTOR-RESISTOR	3	
QR7315,16		UN5213	TRANSISTOR	2	
QR7317		XN4213	TRANSISTOR-RESISTOR	1	
QR7601		UN5213	TRANSISTOR	1	
			RESISTORS		
R304		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R307		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R308		ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R310		ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R312		ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R315		ERJ6GMYJ393	M.RESISTOR CH 1/10W 39K	1	
R316		ERJ6GMYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R318,19		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	2	
R322		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R327		ERJ6GEYK125	M.RESISTOR CH 1/10W 1.2M	1	
R606		ERJ6GMYJ104	M.RESISTOR CH 1/10W 100K	1	
R607		ERJ6GMYJ273	M.RESISTOR CH 1/10W 27K	1	
R608		ERJ6GMYJ183	M.RESISTOR CH 1/10W 18K	1	
R610-13		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	4	
R614		ERJ6GMYJ563	M.RESISTOR CH 1/10W 56K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R615		ERJ6GMYJ682	M.RESISTOR CH 1/10W 6.8K	1	
R616,17		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	2	
R631		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R632		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R633-35		ERDS2TJ102	C.RESISTOR 1/4W 1K	3	
R636		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R637		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R638		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R639		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R701		ERJ3GEYJ682	M.RESISTOR CH 1/16W 6.8K	1	
R702		ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
R703		ERJ3GEYJ183	M.RESISTOR CH 1/16W 18K	1	
R704		ERJ3GEYJ152	M.RESISTOR 1/16W 1.5K	1	
R705		ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
R706		ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R707		ERJ3GEYJ272	M.RESISTOR CH 1/16W 2.7K	1	
R709		ERJ3GEYJ183	M.RESISTOR CH 1/16W 18K	1	
R710		ERJ3GEYJ122	M.RESISTOR CH 1/16W 1.2K	1	
R712		ERJ3GEYJ105	M.RESISTOR CH 1/16W 1M	1	
R713		ERJ3GEYJ184	M.RESISTOR CH 1/16W 180K	1	
R714		ERJ3GEYJ154	M.RESISTOR CH 1/16W 150K	1	
R715		ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R716		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R717		ERJ3GEYJ121	M.RESISTOR CH 1/16W 120	1	
R718		ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R720		ERJ3GEYJ102	M.RESISTOR 1/16W 1K	1	
R721-23		ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	3	
R724		VREO040E471	M.RESISTOR CH 1/10W 470	1	
R725		ERJ3GEYJ271	M.RESISTOR CH 1/16W 270	1	
R726		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R727		ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R728		ERJ3GEYJ152	M.RESISTOR 1/16W 1.5K	1	
R729-32		ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	4	
R733		ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R734		ERJ3GEYJ562	M.RESISTOR CH 1/16W 5.6K	1	
R735		ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	1	
R736		ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R737		ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	1	
R738		ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R748		VREO040E151	M.RESISTOR CH 1/10W 150	1	
R751,52		ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	2	
R753		ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	1	
R756		ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R758		ERJ3GEYJ102	M.RESISTOR 1/16W 1K	1	
R759		ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
R760		ERJ3GEYJ562	M.RESISTOR CH 1/16W 5.6K	1	
R761		ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	1	
R763,64		ERJ3GEYJ272	M.RESISTOR CH 1/16W 2.7K	2	
R765		ERJ3GEYJ682	M.RESISTOR CH 1/16W 6.8K	1	
R766		ERJ3GEYJ152	M.RESISTOR 1/16W 1.5K	1	
R767		ERJ3GEYJ332	M.RESISTOR 1/16W 3.3K	1	
R768		ERJ3GEYJ122	M.RESISTOR CH 1/16W 1.2K	1	
R769		ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	1	
R770,71		ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	2	
R772		ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R773		ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	1	
R774		ERJ3GEYJ562	M.RESISTOR CH 1/16W 5.6K	1	
R775		ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R776		ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	1	
R777		ERJ6GEYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R778		ERJ6GEYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R779		ERJ3GEYJ820	M.RESISTOR CH 1/16W 82	1	
R792		ERJ3GEYJ120	M.RESISTOR CH 1/16W 12	1	
R793		ERJ3GEYJ102	M.RESISTOR 1/16W 1K	1	
R794		ERJ6GEYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R813		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R814		ERJ6GMYJ393	M.RESISTOR CH 1/10W 39K	1	
R815		ERJ6GMYJ821	M.RESISTOR CH 1/10W 820	1	
R816		ERJ6GMYJ471	M.RESISTOR CH 1/10W 470	1	
R817		ERJ6GMYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R818		ERJ6GMYJ681	M.RESISTOR CH 1/10W 680	1	
R819		ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R820,21		ERJ6GMYJ122	M.RESISTOR CH 1/10W 1.2K	2	
R822		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R823,24		ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	2	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R827		ERJ6GMYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R828		ERJ6GMYJ271	M.RESISTOR CH 1/10W 270	1	
R829		ERJ6GMYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R830		ERJ6GMYJ271	M.RESISTOR CH 1/10W 270	1	
R831		ERJ6GMYJ681	M.RESISTOR CH 1/10W 680	1	
R832		ERJ6GMYJ154	M.RESISTOR CH 1/10W 150K	1	
R833		ERJ6GMYJ204	M.RESISTOR CH 1/10W 200K	1	
R834		ERJ6GMYJ153	M.RESISTOR CH 1/10W 15K	1	
R835		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R836		ERJ6GMYJ154	M.RESISTOR CH 1/10W 150K	1	
R848		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R849		ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R850		ERJ6GMYJ563	M.RESISTOR CH 1/10W 56K	1	
R853		ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R855		ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R857		ERJ6GMYJ101	M.RESISTOR 1/10W 100	1	
R858		ERJ6GMYJ561	M.RESISTOR CH 1/10W 560	1	
R859		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R1001		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R2001		ERJ6GMYJ104	M.RESISTOR CH 1/10W 100K	1	
R2002		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R2003		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R2004		ERG12SJ561	M.RESISTOR 1/2W 560	1	
R2005		ERJ6GMYG821	M.RESISTOR CH 1/10W 820	1	
R2006		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R2007		ERJ6GMYG432	M.RESISTOR CH 1/10W 4.3K	1	
R2008		ERJ6GMYG473	M.RESISTOR CH 1/10W 47K	1	
R2012		ERJ6GMYJ684	M.RESISTOR CH 1/10W 680K	1	
R2013		ERJ6GMYG103	M.RESISTOR CH 1/10W 10K	1	
R2014		ERJ6GMYG133	M.RESISTOR CH 1/10W 13K	1	
R2015		ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R2016		ERJ6GMYJ105	M.RESISTOR CH 1/10W 1M	1	
R2017		EROS2CKG6800	M.RESISTOR 1/4W 680	1	
R2018		ERX12SJR47	M.RESISTOR CH 1/2W 0.47	1	
R2019-21		ERDS2TJ560	C.RESISTOR 1/4W 56	3	
R2022		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R2023		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R2024		ERJ6GMYJ563	M.RESISTOR CH 1/10W 56K	1	
R2030		ERJ6GMYJ683	M.RESISTOR CH 1/10W 68K	1	
R2031		ERJ6GMYJ563	M.RESISTOR CH 1/10W 56K	1	
R2032		ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
R2034		ERJ6GMYJ682	M.RESISTOR CH 1/10W 6.8K	1	
R2035,36		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	2	
R2037		ERJ6GMYJ244	M.RESISTOR CH 1/10W 240K	1	
R2038		ERJ6GMYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R2039		ERJ6GMYJ105	M.RESISTOR CH 1/10W 1M	1	
R2040,41		ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	2	
R2042		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R2043		ERJ6GMYJ105	M.RESISTOR CH 1/10W 1M	1	
R2044		ERJ6GMYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R2045		ERJ6GMYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R2046		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R2047,48		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	2	
R2049		ERJ6GMYJ683	M.RESISTOR CH 1/10W 68K	1	
R2050		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R2051		ERJ6GMYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R2052		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R2053,54		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	2	
R2055		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R2056		ERX1SJ1R8	M.RESISTOR 1W 1.8	1	
R2057		ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
R2058		ERJ6GMYJ153	M.RESISTOR CH 1/10W 15K	1	
R3001		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
R3002		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R3003		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R3004		ERJ6GMYJ561	M.RESISTOR CH 1/10W 560	1	
R3005		ERJ6GMYJ391	M.RESISTOR CH 1/10W 390	1	
R3006		ERJ6GMYJ561	M.RESISTOR CH 1/10W 560	1	
R3007		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R3014		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R3018		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3019		ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R3021		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R3023		ERJ6GMYJ471	M.RESISTOR CH 1/10W 470	1	
R3024		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R3025		ERJ6GMYJ821	M.RESISTOR CH 1/10W 820	1	
R3026		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R3027		ERJ6GMYJ821	M.RESISTOR CH 1/10W 820	1	
R3028		ERJ6GMYJ750	M.RESISTOR CH 1/10W 75	1	
R3029		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R3031		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R3032		ERJ6GMYJ104	M.RESISTOR CH 1/10W 100K	1	
R3033		ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R3034		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R3035		ERJ6GMYJ561	M.RESISTOR CH 1/10W 560	1	
R3037		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3038		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R3039		ERJ6GMYJ681	M.RESISTOR CH 1/10W 680	1	
R3040,41		ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	2	
R3042		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3043		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R3049		ERJ6GMYJ101	M.RESISTOR 1/10W 100	1	
R4001		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R4002		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R4003		ERJ6GMYJ273	M.RESISTOR CH 1/10W 27K	1	
R4004		ERJ6GMYG432	M.RESISTOR CH 1/10W 4.3K	1	
R4005		ERJ6GMYJ244	M.RESISTOR CH 1/10W 240K	1	
R4006		ERJ6GMYG683	M.RESISTOR CH 1/10W 68K	1	
R4007		ERJ6GMYG100	M.RESISTOR CH 1/10W 10	1	
R4008,09		ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	2	
R4010		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R4011		ERDS2TJ471	C.RESISTOR 1/4W 470	1	
R4013		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R4014		ERJ6GMYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R4015		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R4016		ERJ6GMYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R4017		ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R4019		ERJ6GMYJ153	M.RESISTOR CH 1/10W 15K	1	
R4020		ERJ6GMYJ123	M.RESISTOR CH 1/10W 12K	1	
R4021		ERJ6GMYJ153	M.RESISTOR CH 1/10W 15K	1	
R4022		ERJ6GMYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R4024		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R4025		ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
R4026		ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R4028		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R4029		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R4032		ERJ6GMYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R4033,34		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	2	
R4035,36		ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	2	
R4037		ERJ6GMYJ104	M.RESISTOR CH 1/10W 100K	1	
R4038		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R4501,02		ERJ3GEYG363	M.RESISTOR CH 1/16W 36K	2	
R4503		VRE0071E36C	M.RESISTOR 1/10W	1	
R4504,05		ERJ6GEYJ393	M.RESISTOR CH 1/10W 39K	2	
R4506,07		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	2	
R4508		ERJ6GEYG224	M.RESISTOR CH 1/10W 220K	1	
R4509		ERJ6GEYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R4511		ERJ6GEYG303	M.RESISTOR CH 1/10W 30K	1	
R4512		VRE0034E163	M.RESISTOR CH 1/10W 16K	1	
R4513		ERJ3GEYG103	M.RESISTOR CH 1/16W 10K	1	
R4514		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R4518,19		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	2	
R4522		ERJ6GEYJ225	M.RESISTOR CH 1/10W 2.2M	1	
R4527		VRE0034E333	M.RESISTOR CH 1/10W 33K	1	
R4528		VRE0034E153	M.RESISTOR CH 1/10W 15K	1	
R4529		ERJ6GEYG562	M.RESISTOR CH 1/10W 5.6K	1	
R4530		ERJ3GEYJ334	M.RESISTOR CH 1/16W 330K	1	
R4534		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R4535		ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R4539		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R4540		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R4541		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R4542		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R4543		ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	1	
R4551,52		ERJ3GEYJ393	M.RESISTOR CH 1/16W 39K	2	
R4553		ERJ6GEYJ273	M.RESISTOR CH 1/10W 27K	1	
R4554		ERJ3GEYJ273	M.RESISTOR CH 1/16W 27K	1	
R4558		ERJ6GEYG224	M.RESISTOR CH 1/10W 220K	1	
R4561		ERJ6GEYG303	M.RESISTOR CH 1/10W 30K	1	
R4562		VRE0034E10C	M.RESISTOR 1/10W	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R4563		ERJ3GEYG272	M.RESISTOR CH 1/16W 2.7K	1	
R4568		ERJ6GEYJ273	M.RESISTOR CH 1/10W 27K	1	
R4569		ERJ3GEYJ273	M.RESISTOR CH 1/16W 27K	1	
R4572		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R4573		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R4577		ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R4578		VRE0034E473	M.RESISTOR CH 1/10W 47K	1	
R4581		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R4584		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R4585		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R4586		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R4587,88		ERJ3GEYJ273	M.RESISTOR CH 1/16W 27K	2	
R4591		ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R4592		ERJ6GEYJ563	M.RESISTOR CH 1/10W 56K	1	
R4593		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R4594		ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R4603		ERJ3GEYG183	M.RESISTOR CH 1/16W 18K	1	
R4606		ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R4610		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R4611,12		ERJ6GEYJ331	M.RESISTOR CH 1/10W 330	2	
R4613		ERJ6GEYJ394	M.RESISTOR CH 1/10W 390K	1	
R4615		ERJ6GEYJ133	M.RESISOTR CH 1/10W 13K	1	
R4616		ERJ6GEYJ105	M.RESISTOR CH 1/10W 1M	1	
R4638		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R4649		ERJ3GEYG470	M.RESISTOR CH 1/16W 47	1	
R4651		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R4653		ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1	
R4654		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R4655		ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R4656		ERJ6GEYG243	M.RESISTOR CH 1/10W 24K	1	
R4657		ERJ6GEYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R4666		ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1	
R6001-04		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	4	
R6005-08		ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	4	
R6009		ERJ6GMYG332	M.RESISTOR CH 1/10W 3.3K	1	
R6010		ERJ6GMYG102	M.RESISTOR CH 1/10W 1K	1	
R6011		ERJ6GMYG112	M.REISITOR CH 1/10W 1.1K	1	
R6013		EROS2CKG2000	M.RESISTOR 1/4W 200	1	
R6014,15		ERJ6GMYG223	M.RESISTOR CH 1/10W 22K	2	
R6016		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R6017		ERJ6GMYJ271	M.RESISTOR CH 1/10W 270	1	
R6018		ERJ6GMYJ683	M.RESISTOR CH 1/10W 68K	1	
R6019		ERJ6GMYJ104	M.RESISTOR CH 1/10W 100K	1	
R6020		ERJ6GMYJ101	M.RESISTOR 1/10W 100	1	
R6021		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R6022		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R6023,24		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	2	
R6025,26		ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	2	
R6027		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R6028		ERJ6GMYJ224	M.RESISTOR CH 1/10W 220K	1	
R6029		ERJ6GMYJ104	M.RESISTOR CH 1/10W 100K	1	
R6030		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R6031		ERJ6GMYJ183	M.RESISTOR CH 1/10W 18K	1	
R6032,33		ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	2	
R6034		ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R6035,36		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	2	
R6037		ERJ6GMYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R6038		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R6039		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R6043		ERJ6GMYJ683	M.RESISTOR CH 1/10W 68K	1	
R6044		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R6045,46		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	2	
R6050,51		ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	2	
R6052,53		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	2	
R6054		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R6057		ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R6078		VRE0034E103	M.RESISTOR CH 1/10W 10K	1	
R6079		ERJ6GMYJ564	M.RESISTOR CH 1/10W 560K	1	
R6080		VRE0034E103	M.RESISTOR CH 1/10W 10K	1	
R6081		VRE0034E472	M.RESISTOR CH 1/10W 4.7K	1	
R6082		VRE0034E512	M.RESISTOR CH 1/10W 5.1K	1	
R7002		ERJ6GMYJ181	M.RESISTOR CH 1/10W 180	1	
R7004,05		ERJ6GMYJ151	M.RESISTOR CH 1/10W 150	2	
R7006,07		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	2	
R7009,10		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	2	
R7011		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R7013,14		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	2	
R7015,16		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	2	
R7018,19		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	2	
R7020		ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
R7024-26		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	3	
R7027		ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R7028		ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
R7032		ERJ6GMYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R7034,35		ERJ6GMYJ101	M.RESISTOR 1/10W 100	2	
R7302		ERJ3GEYJ392	M.RESISTOR CH 1/16W 3.9K	1	
R7303		ERJ3GEYJ182	M.RESISTOR CH 1/16W 1.8K	1	
R7304		ERJ3GEYJ392	M.RESISTOR CH 1/16W 3.9K	1	
R7305		ERJ3GEYJ822	M.RESISTOR CH 1/16W 8.2K	1	
R7306		ERJ3GEYJ471	M.RESISTOR CH 1/16W 470	1	
R7307		ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R7308		ERJ3GEYJ273	M.RESISTOR CH 1/16W 27K	1	
R7309		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R7310		ERJ3GEYJ474	M.RESISTOR CH 1/16W 470K	1	
R7311		ERJ3GEYJ562	M.RESISTOR CH 1/16W 5.6K	1	
R7312		ERJ3GEYJ563	M.RESISTOR CH 1/16W 56K	1	
R7313		ERJ3GEYJ824	M.RESISTOR CH 1/16W 820K	1	
R7314,15		ERJ3GEYJ224	M.RESISTOR CH 1/16W 220K	2	
R7316		ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R7317		ERJ3GEYJ393	M.RESISTOR CH 1/16W 39K	1	
R7318		ERJ3GEYJ153	M.RESISTOR CH 1/16W 15K	1	
R7321		ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R7322		ERJ3GEYJ102	M.RESISTOR 1/16W 1K	1	
R7323		ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R7324,25		ERJ3GEYJ271	M.RESISTOR CH 1/16W 270	2	
R7329		ERJ3GEYJ102	M.RESISTOR 1/16W 1K	1	
R7330		ERJ3GEYJ332	M.RESISTOR 1/16W 3.3K	1	
R7334-37		ERJ3GEYJ471	M.RESISTOR CH 1/16W 470	4	
R7338		ERJ3GEYJ182	M.RESISTOR CH 1/16W 1.8K	1	
R7339		ERJ3GEYJ330	M.RESISTOR CH 1/16W 33	1	
R7340		ERJ3GEYJ152	M.RESISTOR 1/16W 1.5K	1	
R7341		ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	1	
R7342		ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R7345		ERJ3GEYJ182	M.RESISTOR CH 1/16W 1.8K	1	
R7346		ERJ3GEYJ221	M.RESISTOR CH 1/16W 220	1	
R7347		ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	1	
R7348		ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
R7351-53		ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	3	
R7354,55		ERJ3GEYJ102	M.RESISTOR 1/16W 1K	2	
R7356-58		ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	3	
R7359		ERJ3GEYJ822	M.RESISTOR CH 1/16W 8.2K	1	
R7360-62		ERJ3GEYJ154	M.RESISTOR CH 1/16W 150K	3	
R7363		ERJ3GEYJ124	M.RESISTOR CH 1/16W 120K	1	
R7364		ERJ3GEYJ683	M.RESISTOR CH 1/16W 68K	1	
R7671,72		ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	2	
R7673		ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R7674		ERJ3GEYJ124	M.RESISTOR CH 1/16W 120K	1	
R7675		ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R7676		ERG1SJ152	M.RESISTOR 1W 1.5K	1	
R7677		ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R7678		ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	1	
R7679		VRE0040E100	M.RESISTOR CH 1/10W 10	1	
R7680		ERJ3GEYJ102	M.RESISTOR 1/16W 1K	1	
R7691		ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R7695		ERJ3GEYJ562	M.RESISTOR CH 1/16W 5.6K	1	
R7696		ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R8001		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R8001		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R8002		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R8002		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R8003		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R8003		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R8004		ERJ6GEYJ821	M.RESISTOR CH 1/10W 820	1	
R8005		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R8007		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R8008,09		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	2	
R8010		ERJ6GEYG911	M.RESISTOR CH 1/10W 910	1	
R8011		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R8014		ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1	
R8015		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R8016		ERJ6GEYJ181	M.RESISTOR CH 1/10W 180	1	
			TRANSFORMERS		
T703		EIV5EC063A	TRANSFORMER	1	
T704		EIV5EC040A	TRANSFORMER	1	
T711		EIS5EC008A	TRANSFORMER	1	
T4001		EIQ7QF013Q	TRANSFORMER	1	
T7301		EIR7QG001B	IF TRANSFORMER	1	
T7302,03		EIL7QH012Q	TRANSFORMER	2	
T7304		EIS5EC007A	TRANSFORMER	1	
T7305		EIS5EC005A	TRANSFORMER	1	
			VARIABLE RESISTORS		
VR701		EVNCBAA00B23	V.RESISTOR	1	
VR751		EVNCBAA00B53	V.RESISTOR	1	
VR803		EVNCBAA00B14	V.RESISTOR	1	
VR2001		EVNDXAA00B54	V.RESISTOR 50K	1	
VR2006		EVNDXAA00B15	V.RESISTOR 100K	1	
VR2011		EVNDXAA00B15	V.RESISTOR 100K	1	
VR2018,19		EVNDXAA00B15	V.RESISTOR 100K	2	
VR3001		EVNDXAA00B23	V.RESISTOR 2K	1	
VR3012,13		EVNDXAA00B52	V.RESISTOR 500	2	
VR4001		EVNDXAA00B25	V.RESISTOR 200K	1	
VR4501		EVMECSA00B53	V.RESISTOR	1	
VR4502		EVMEASA00B24	V.RESISTOR	1	
VR4507		EVMEASA00B24	V.RESISTOR	1	
VR4509		EVMECSA00BY3	V.RESISTOR	1	
VR4550		EVMECSA00BS3	V.RESISTOR	1	
VR4551,52		EVMEASA00B55	V.RESISTOR	2	
VR7301		EVTEASA00B14	V.RESISTOR	1	
VR7326		EVTEASA00B52	V.RESISTOR	1	
VR7328		EVTEASA00B52	V.RESISTOR	1	
VR7340		EVNCBAA00B14	V.RESISTOR	1	
VR7342		EVNCBAA00B14	V.RESISTOR	1	
VR7344		EVNCBAA00B14	V.RESISTOR	1	
VR8001		EVNDXAA00B23	V.RESISTOR 2K	1	
			CRYSTAL OSCILLATORS		
X601		VSX0574	CRYSTAL OSCILLATOR	1	
X602		VSX0176	CRYSTAL OSCILLATOR	1	
X710		EFCH38MWV3	CRYSTAL OSCILLATOR	1	
X711		EFCT3F02W3B	CRYSTAL OSCILLATOR	1	
X712		EFCT6R0MS5	CRYSTAL OSCILLATOR	1	
X714		VSX0553	CRYSTAL OSCILLATOR	1	
X715		VSX0547	CRYSTAL OSCILLATOR	1	
X716		EFCS4504BFB	CRYSTAL OSCILLATOR	1	
X717		EFCT5744BF	CRYSTAL OSCILLATOR	1	
X718		EFCH32MWP1	CRYSTAL OSCILLATOR	1	
X719		EFCS4504BFB	CRYSTAL OSCILLATOR	1	
X720		EFCS6004BF	CRYSTAL OSCILLATOR	1	
X801		VSX0162	CRYSTAL OSCILLATOR	1	
X6001		VSX0409	CRYSTAL OSCILLATOR	1	
X7301,02		EFCS5R5MS5B	CRYSTAL OSCILLATOR	2	
X7303,04		EFCS5R74MS5B	CRYSTAL OSCILLATOR	2	
X7305		ELB5A016	FILTER	1	
X8001		VSX0473	CRYSTAL OSCILLATOR	1	
			MISCELLANEOUS		
		VEE8451	CONNECTOR	1	(P1001,3-P1102)
		VWJ0682A	FLAT CARD CABLE	1	(P3001-P501)
		VWJ0683A	FLAT CARD CABLE	1	(P2003-P1507)
		VWJ00B7A	FLAT CARD CABLE	1	(P6001-P1505)
		VWJ121W200BB	FLAT CARD CABLE	1	(P7401-P7501)
		VWJ240W160BB	FLAT CARD CABLE	1	(P7402-P7502)
		VJF1056	HARNESS LIFTER	1	
		VJF1001	WIRE SADDLE	1	
		ENV59845H3	TUNER	1	<!>FOR TV DEMO.
		VSC3242	SHIELD COVER (MAIN)	1	FOR TV DEMODULATOR
		VSC3815	SHIELD COVER (TOP)	1	FOR TV DEMODULATOR

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
		VEP03977B	MAIN C.B.A.	1	(RTL)NV-F125BD
			CAPACITORS		
C305		ECUM1H470JCN	C.CAPACITOR CH 50V 47P	1	
C306,07		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	2	
C308		ECEA1EKN4R7	E.CAPACITOR 25V 4.7U	1	
C310		ECEA1CK220	E.CAPACITOR 16V 22U	1	
C311		ECEA0JK101	E.CAPACITOR 6.3V 100U	1	
C312		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C313,14		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C315		ECUM1H560JCN	C.CAPACITOR CH 50V 56P	1	
C319		ECEA0JK101	E.CAPACITOR 6.3V 100U	1	
C320		ECUM1H820JCN	C.CAPACITOR CH 50V 82P	1	
C321		ECUM1H333KBN	C.CAPACITOR CH 50V 0.033U	1	
C601		ECUM1H390JCN	C.CAPACITOR CH 50V 39P	1	
C602		ECRHA060G41	CAPACITOR	1	
C603		ECUM1C105ZFN	C.CAPACITOR 16V 1U	1	
C605		ECUM1H332KBN	C.CAPACITOR CH 50V 3300P	1	
C606		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C607		ECEA0JK221	E.CAPACITOR 6.3V 220U	1	
C608		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C609,10		ECUM1H100DCN	C.CAPACITOR CH 50V 10P	2	
C611		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C614		ECEA1EK3R3	E.CAPACITOR 25V 3.3U	1	
C701,02		ECEA1CK100	E.CAPACITOR 16V 10U	2	
C705		ECEA1CK220	E.CAPACITOR 16V 22U	1	
C706		ECQV1H104JZ	P.CAPACITOR 50V 0.1U	1	
C707		ECEA1HKR47	E.CAPACITOR 50V 0.47U	1	
C708		ECEA1CK220	E.CAPACITOR 16V 22U	1	
C709		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C710		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C711		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C712		ECQB1H822JH	P.CAPACITOR 50V 8200P	1	
C713		ECQV1H333JZ	P.CAPACITOR 50V 0.033U	1	
C714		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C715		ECUM1H151JCN	C.CAPACITOR CH 50V 150P	1	
C716		ECUM1H331JCN	C.CAPACITOR CH 50V 330P	1	
C717		ECEA1HK0R1	E.CAPACITOR 50V 0.1U	1	
C718-20		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	3	
C721		ECEA1CK470	E.CAPACITOR 16V 47U	1	
C722		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C723		ECUM1H120JCN	C.CAPACITOR CH 50V 12P	1	
C724		ECUM1H470JFN	C.CAPACITOR CH 50V 47P	1	
C725		ECQV1H473JZ	P.CAPACITOR 50V 0.047U	1	
C726		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C727		ECUM1H270JCN	C.CAPACITOR CH 50V 27P	1	
C728		ECEA1HKR47	E.CAPACITOR 50V 0.47U	1	
C729		ECUX1H390JCV	C.CAPACITOR CH 50V 39P	1	
C730-32		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	3	
C733		ECEA1HK2R2	E.CAPACITOR 50V 2.2U	1	
C734		ECQV1H104JZ	P.CAPACITOR 50V 0.1U	1	
C735		ECEA1CK470	E.CAPACITOR 16V 47U	1	
C736-42		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	7	
C752		ECUX1H820JCV	C.CAPACITOR CH 50V 82P	1	
C754,55		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	2	
C756		ECEA1CK470	E.CAPACITOR 16V 47U	1	
C757		ECUX1H470JCV	C.CAPACITOR 50V 47P	1	
C758,59		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	2	
C760		ECEA1HK0R1	E.CAPACITOR 50V 0.1U	1	
C761		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C762		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C763-67		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	5	
C790		ECUX1H100DCV	C.CAPACITOR 50V 10P	1	
C796		ECUX1H150JCV	C.CAPACITOR 50V 15P	1	
C797-99		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	3	
C805		ECEA0JK221	E.CAPACITOR 6.3V 220U	1	
C806		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C807		ECUM1H181JCN	C.CAPACITOR CH 50V 180P	1	
C808		ECUM1H270JCN	C.CAPACITOR CH 50V 27P	1	
C809		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C812-14		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	3	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C815		ECUM1H560JCN	C.CAPACITOR CH 50V 56P	1	
C816		ECUM1H1032FN	C.CAPACITOR CH 50V 0:01U	1	
C817		ECUM1H560JCN	C.CAPACITOR CH 50V 56P	1	
C818		ECUM1H1032FN	C.CAPACITOR CH 50V 0.01U	1	
C819		ECUM1H470JCN	C.CAPACITOR CH 50V 47P	1	
C820-25		ECUM1H1032FN	C.CAPACITOR CH 50V 0.01U	6	
C826		ECEA0JK101	E.CAPACITOR 6.3V 100U	1	
C827		ECUM1H1032FN	C.CAPACITOR CH 50V 0.01U	1	
C828		ECUM1H470JCN	C.CAPACITOR CH 50V 47P	1	
C829		ECUM1H1032FN	C.CAPACITOR CH 50V 0.01U	1	
C830		ECEA1HK0R1	E.CAPACITOR 50V 0.1U	1	
C831		ECQB1H332JH	P.CAPACITOR 50V 0.27U	1	
C832		ECUM1H331JCN	C.CAPACITOR CH 50V 330P	1	
C838		ECUM1H1042FN	C.CAPACITOR CH 50V 0.1U	1	
C839		ECUM1H100DCN	C.CAPACITOR CH 50V 10P	1	
C841		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C842		ECEA0JK101	E.CAPACITOR 6.3V 100U	1	
C843		ECUM1H1042FN	C.CAPACITOR CH 50V 0.1U	1	
C845		ECEA1HK010	E.CAPACITOR 50V 1U	1	
C846		ECUM1H1032FN	C.CAPACITOR CH 50V 0.01U	1	
C848-50		ECUM1H1032FN	C.CAPACITOR CH 50V 0.01U	3	
C1001		ECA1EM101	E.CAPACITOR 25V 100U	1	
C1002		ECEA1CK330	E.CAPACITOR 16V 33U	1	
C1003		ECEA0JK330	E.CAPACITOR 6.3V 33U	1	
C1004		ECA0JM471	E.CPAACITOR 6.3V 470U	1	
C1005		ECEA1APZ221	E.CAPACITOR 10V 220U	1	
C2001-03		ECUM1H1042FN	C.CAPACITOR CH 50V 0.1U	3	
C2004-06		ECEA1CK470	E.CAPACITOR 16V 47U	3	
C2007		ECEA1HK010	E.CAPACITOR 50V 1U	1	
C2008		ECA0JM221	E.CAPACITOR 6.3V 220U	1	
C2009		ECEA1HKR22	E.CAPACITOR 50V 0.22U	1	
C2010,11		VCUV1H333KBN	C.CAPACITOR 50V 0.033U	2	
C2012		ECUM1H1032FN	C.CAPACITOR CH 50V 0.01U	1	
C2013		ECQV1H683JZ	P.CAPACITOR 50V 0.068U	1	
C2014		ECA1CM101	E.CAPACITOR 16V 100U	1	
C2015-18		VCUV1H333KBN	C.CAPACITOR 50V 0.033U	4	
C2019-21		ECEA1HK2R2	E.CAPACITOR 50V 2.2U	3	
C2027		ECUM1H222KBN	C.CAPACITOR CH 50V 2200P	1	
C2028		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C2029		ECEA1HK3R3	E.CAPACITOR 50V 3.3U	1	
C2030		ECEA1HKN3R3	E.CAPACITOR 50V 3.3U	1	
C2031		ECUM1H471JCN	C.CAPACITOR 50V 470P	1	
C2032		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C2033		ECEA1HK3R3	E.CAPACITOR 50V 3.3U	1	
C2034		ECEA0JK220	E.CAPACITOR 6.3V 22U	1	
C2035		ECUM1H1032FN	C.CAPACITOR CH 50V 0.01U	1	
C2036		ECUM1H222KBN	C.CAPACITOR CH 50V 2200P	1	
C2037		ECA0JM221	E.CAPACITOR 6.3V 220U	1	
C2038		ECQV1H334JZ	P.CAPACITOR 50V 0.33U	1	
C2039		ECEA1HKNR47	E.CAPACITOR 50V 0.47U	1	
C2040		ECUM1H680JCN	C.CAPACITOR CH 50V 68P	1	
C2041,42		ECUM1C105ZFN	C.CAPACITOR 16V 1U	2	
C2043		ECUM1H392KBN	C.CAPACITOR CH 50V 3900P	1	
C2044		ECUM1H223KBN	C.CAPACITOR CH 50V 0.022U	1	
C2045		ECUM1H1042FN	C.CAPACITOR CH 50V 0.1U	1	
C2046		ECUM1H680JCN	C.CAPACITOR CH 50V 68P	1	
C2047		ECEA1HKNR47	E.CAPACITOR 50V 0.47U	1	
C2048		ECA0JM221	E.CAPACITOR 6.3V 220U	1	
C2049		ECEA1HK4R7	E.CAPACITOR 50V 4.7U	1	
C2050		ECUM1H101JCN	C.CAPACITOR CH 50V 100P	1	
C2051		ECQV1H683JZ	P.CAPACITOR 50V 0.068U	1	
C2052		ECEA1HKR47	E.CAPACITOR 50V 0.47U	1	
C2053		ECEA1CK470	E.CAPACITOR 16V 47U	1	
C2055		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C2056		ECUM1H1042FN	C.CAPACITOR CH 50V 0.1U	1	
C3002,03		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	2	
C3004		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C3008		ECUM1H1032FN	C.CAPACITOR CH 50V 0.01U	1	
C3009		ECUM1C105ZFN	C.CAPACITOR 16V 1U	1	
C3011		ECUM1H1042FN	C.CAPACITOR CH 50V 0.1U	1	
C3012		ECUM1H1032FN	C.CAPACITOR CH 50V 0.01U	1	
C3013		ECEA0JK221	E.CAPACITOR 6.3V 220U	1	
C3014		ECUM1H560JCN	C.CAPACITOR CH 50V 56P	1	
C3015		ECUM1H080DCN	C.CAPACITOR CH 50V 8P	1	
C3016,17		ECUM1H180JCN	C.CAPACITOR CH 50V 18P	2	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C3018		ECUM1H181JCN	C.CAPACITOR CH 50V 180P	1	
C3020		ECUM1H151JCN	C.CAPACITOR CH 50V 150P	1	
C3021		ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C3022		ECUM1H180JCN	C.CAPACITOR CH 50V 18P	1	
C3023		ECUM1H330JCN	C.CAPACITOR CH 50V 33P	1	
C3024		ECUM1H681JCN	C.CAPACITOR CH 50V 680P	1	
C3026		ECUM1H1032FN	C.CAPACITOR CH 50V 0.01U	1	
C3027		ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C3028		ECUM1H680JCN	C.CAPACITOR CH 50V 68P	1	
C3030		ECUM1H181JCN	C.CAPACITOR CH 50V 180P	1	
C3031		ECUM1H1032FN	C.CAPACITOR CH 50V 0.01U	1	
C3032		ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C3033		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3034		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C3035		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C3038		ECEA1CK470	E.CAPACITOR 16V 47U	1	
C3040		ECUM1H1032FN	C.CAPACITOR CH 50V 0.01U	1	
C3043		ECUM1H1042FN	C.CAPACITOR CH 50V 0.1U	1	
C3044		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C3045,46		ECEA1AK220	E.CAPACITOR 10V 22U	2	
C3047		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3048		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C3049		ECUM1H1042FN	C.CAPACITOR CH 50V 0.1U	1	
C4001		ECA0JM471	E.CPAACITOR 6.3V 470U	1	
C4002,03		ECUM1H1042FN	C.CAPACITOR CH 50V 0.1U	2	
C4004		ECEA1CPZ101	E.CAPACITOR 16V 100U	1	
C4005		ECUM1C2242FN	C.CAPACITOR CH 16V 0.22U	1	
C4006		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C4007		ECEA1CPZ101	E.CAPACITOR 16V 100U	1	
C4008		ECUM1C224ZFN	C.CAPACITOR CH 16V 0.22U	1	
C4009		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C4010		ECEA1CK470	E.CAPACITOR 16V 47U	1	
C4011		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C4012		ECQB1H103KZ	P.CAPACITOR 50V 0.01U	1	
C4013		ECQP1222J2	P.CAPACITOR 0.0022U	1	
C4014		ECKD2H331KB	C.CAPACITOR 500V 330P	1	
C4015		ECQB1H102KZ	P.CAPACITOR 50V 1000P	1	
C4016		ECEA16M33	E.CAPACITOR 16V 33U	1	
C4019		ECEA0JK220	E.CAPACITOR 6.3V 22U	1	
C4020		ECUM1H222KBN	C.CAPACITOR CH 50V 2200P	1	
C4021		ECUM1H683ZFN	C.CAPACITOR CH 50V 0.068U	1	
C4022		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C4023		ECUM1H471JCN	C.CAPACITOR 50V 470P	1	
C4025		ECEA1HK010	E.CAPACITOR 50V 1U	1	
C4027		ECEA0JK220	E.CAPACITOR 6.3V 22U	1	
C4028		ECEA1EK4R7	E.CAPACITOR 25V 4.7U	1	
C4029		ECUM1H182JN	C.CAPACITOR CH 50V 1800P	1	
C4030		ECUM1H561JCN	C.CAPACITOR CH 50V 560P	1	
C4503		ECUX1H152KBV	C.CAPACITOR CH 50V 1500P	1	
C4504,05		ECEA1CPZ470	E.CAPACITOR 16V 47U	2	
C4506		VCEA1CAH100	E.CAPACITOR 16V 10U	1	
C4507		ECQB1H223JA	P.CAPACITOR 50V 0.022U	1	
C4508		ECEA1EBZ4R7	E.CAPACITOR 25V 4.7U	1	
C4509		ECEA1APZ470	E.CAPACITOR 10V 47U	1	
C4510		ECQB1H103JA	P.CAPACITOR 50V 0.01U	1	
C4511		ECQB1H332JA	P.CAPACITOR 50V 3300P	1	
C4512		ECUX1H561JV	C.CAPACITOR CH 50V 560P	1	
C4513		ECUM1H681JN	C.CAPACITOR CH 50V 680P	1	
C4514		ECUM1H561JN	C.CAPACITOR CH 50V 560P	1	
C4515		VCEA1EAH4R7	E.CAPACITOR 25V 4.7U	1	
C4517		ECEA1APZ101	E.CAPACITOR 10V 100U	1	
C4518		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C4521		ECUM1C473KBV	C.CAPACITOR CH 16V 0.047U	1	
C4524		VCEA1AAC101	E.CAPACITOR 10V 100U	1	
C4528		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C4530		ECEA0JPK221	E.CAPACITOR 6.3V 220U	1	
C4533		ECEA1CPZ330	E.CAPACITOR 16V 33U	1	
C4537		ECUM1H102JCN	C.CAPACITOR CH 50V 1000P	1	
C4538		ECEA1HUR47	E.CAPACITOR 50V 0.47U	1	
C4539		ECUM1C224ZFN	C.CAPACITOR CH 16V 0.22U	1	
C4541		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C4545		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C4556		VCEA1CAH100	E.CAPACITOR 16V 10U	1	
C4557		ECQB1H223JA	P.CAPACITOR 50V 0.022U	1	
C4558		ECEA1EBZ4R7	E.CAPACITOR 25V 4.7U	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C4559		ECEA1AP2470	E.CAPACITOR 10V 47U	1	
C4560		ECQB1H103JA	P.CAPACITOR 50V 0.01U	1	
C4561		ECQB1H332JA	P.CAPACITOR 50V 3300P	1	
C4562		ECUM1H561JN	C.CAPACITOR CH 50V 560P	1	
C4563		ECUM1H681JN	C.CAPACITOR CH 50V 680P	1	
C4564		ECUM1H561JN	C.CAPACITOR CH 50V 560P	1	
C4565		VCEA1EAH4R7	E.CAPACITOR 25V 4.7U	1	
C4567		ECEA1APZ101	E.CAPACITOR 10V 100U	1	
C4568		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C4576		ECUM1E473KBN	C.CAPACITOR CH 25V 0.047U	1	
C4583		ECEA1CPZ330	E.CAPACITOR 16V 33U	1	
C4585,86		ECEA1APZ101	E.CAPACITOR 10V 100U	2	
C4591		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C4592		ECUX1H152KBV	C.CAPACITOR CH 50V 1500P	1	
C4606		VCEA0JAC470	E.CAPACITOR 6.3V 47U	1	
C4611		ECQB1H103JH	P.CAPACITOR 50V 0.01U	1	
C4616		ECUX1H101JCV	C.CAPACITOR CH 50V 100P	1	
C4617		ECEA1CM22	E.CAPACITOR 10V 22U	1	
C4618		ECQB1H822JH	P.CAPACITOR 50V 8200P	1	
C4619		ECEA1APB100	E.CAPACITOR 10V 10U	1	
C4621		ECEA0JPK221	E.CAPACITOR 6.3V 220U	1	
C4629		ECQB1H103JZ	P.CAPACITOR 50V 0.01U	1	
C4636		ECUM1H471JN	C.CAPACITOR CH 50V 470P	1	
C4638		ECQB1H822JH	P.CAPACITOR 50V 8200P	1	
C4652,53		ECUM1C105ZFN	C.CAPACITOR 16V 1U	2	
C6001		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C6002		ECUM1H221JCN	C.CAPACITOR CH 50V 220P	1	
C6003		ECUM1H223KBN	C.CAPACITOR CH 50V 0.022U	1	
C6004		ECUM1H472KBN	C.CAPACITOR CH 50V 4700P	1	
C6005		ECUM1H392KBN	C.CAPACITOR CH 50V 3900P	1	
C6006		ECUM1H332KBN	C.CAPACITOR CH 50V 3300P	1	
C6007		ECEA0JK220	E.CAPACITOR 6.3V 22U	1	
C6008		ECUM1H180JCN	C.CAPACITOR CH 50V 18P	1	
C6009		ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C6010		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C6011		ECEA0JK220	E.CAPACITOR 6.3V 22U	1	
C6012		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C6013		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C6014,15		ECUM1H271JCN	C.CAPACITOR CH 50V 270P	2	
C6016,17		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C6018		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C6019		ECEA0JK330	E.CAPACITOR 6.3V 33U	1	
C6020		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C6021		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C7002-05		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	4	
C7006		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C7007,08		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C7009		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C7010		ECEA0JK101	E.CAPACITOR 6.3V 100U	1	
C7011		EECS5R5T224N	E.CAPACITOR 5.5V 0.22U	1	
C7012		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C7013		ECEA0JK221	E.CAPACITOR 6.3V 220U	1	
C7017		ECEA1ASN100	E.CAPACITOR 10V 10U	1	
C7018-20		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	3	
C7021,22		ECUM1H332KBN	C.CAPACITOR CH 50V 3300P	2	
C7023		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C7661		ECUM1H104KBM	C.CAPACITOR CH 50V 0.1U	1	
C7662		ECUM1H683KBM	C.CAPACITOR CH 50V 0.068U	1	
C7663		ECUM1H823KBM	C.CAPACITOR CH 50V 0.082U	1	
C7664		ECUM1H273KBM	C.CAPACITOR CH 50V 0.027U	1	
C7665,66		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	2	
C7667		ECEA1HKA100	E.CAPACITOR 50V 10U	1	
C7670,71		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	2	
C7673		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C7675		ECEA1HKN010	E.CAPACITOR 50V 1U	1	
C7676,77		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	2	
C7679		ECEA1HKN010	E.CAPACITOR 50V 1U	1	
C7681		ECEA1CK220	E.CAPACITOR 16V 22U	1	
C7901-03		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	3	
C7904		ECEA1CK470	E.CAPACITOR 16V 47U	1	
C7905		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C7906		ECEA1CK470	E.CAPACITOR 16V 47U	1	
C7907		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C7908		ECQV1H104JZ	P.CAPACITOR 50V. 0.1U	1	
C7909		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C7910		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C7911-13		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	3	
C7914		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C7915		ECUX1H100DCV	C.CAPACITOR 50V 10P	1	
C7916		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C7917		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C7918		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C7919		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C7920		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C7921		ECQB1H102JH	P.CAPACITOR 50V 1000P	1	
C7922		ECQB1H272JH	P.CAPACITOR 50V 2700P	1	
C7923		ECUX1H151JCV	C.CAPACITOR CH 50V 150P	1	
C7924		ECEA1CKN100	E.CAPACITOR 16V 10U	1	
C7925		ECUX1H561JCV	C.CAPACITOR 50V 560P	1	
C7926		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C7927		ECQB1H102JH	P.CAPACITOR 50V 1000P	1	
C7928		ECQB1H272JH	P.CAPACITOR 50V 2700P	1	
C7929		ECUX1H151JCV	C.CAPACITOR CH 50V 150P	1	
C7930		ECEA1CKN100	E.CAPACITOR 16V 10U	1	
C7931		ECUX1H561JCV	C.CAPACITOR 50V 560P	1	
C7932,33		ECEA1CKN100	E.CAPACITOR 16V 10U	2	
C7934		ECUX1H220JCV	C.CAPACITOR CH 50V 22P	1	
C7935		ECUX1H470JCV	C.CAPACITOR 50V 47P	1	
C7937		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C7938		ECEA1HKR47	E.CAPACITOR 50V 0.47U	1	
C7939,40		ECEA1HKN0R1	E.CAPACITOR 50V 0.1U	2	
C7941		ECEA1HKR47	E.CAPACITOR 50V 0.47U	1	
C7942		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C7943		ECUX1H100DCV	C.CAPACITOR 50V 10P	1	
C7945		ECUX1H101JCV	C.CAPACITOR CH 50V 100P	1	
C7946		ECUX1H220JCV	C.CAPACITOR CH 50V 22P	1	
C7947		ECEA1HKR47	E.CAPACITOR 50V 0.47U	1	
C7948		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C7949		ECEA0JK330	E.CAPACITOR 6.3V 33U	1	
C7950-53		ECEA1CKN100	E.CAPACITOR 16V 10U	4	
C7954		ECEA1CK470	E.CAPACITOR 16V 47U	1	
C7955-58		ECEA1CK100	E.CAPACITOR 16V 10U	4	
C7960		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C7961		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C7963		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C7964		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C7965,66		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	2	
C7967		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C8001		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C8001		ECUM1C474ZFN	C.CAPACITOR 16V 0.47U	1	
C8002-04		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	3	
C8006		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C8007		ECEA1AKS330	E.CAPACITOR 10V 33U	1	
C8008		ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C8009		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C8010-12		ECEA1AKS330	E.CAPACITOR 10V 33U	3	
C8013		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C8014		ECUM1H561KBN	C.CAPACITOR CH 50V 560P	1	
C8015		ECUM1H221JCN	C.CAPACITOR CH 50V 220P	1	
C8019		ECUM1H680JCN	C.CAPACITOR CH 50V 68P	1	
C8020		ECUM1H470JCN	C.CAPACITOR CH 50V 47P	1	
			DIODES		
D302		1SS283	DIODE	1	
D303		MA151A	DIODE	1	
D304		1SS254	DIODE	1	
D601,02		1SS254	DIODE	2	
D603		MA151K	DIODE	1	
D701-07		MA77	DIODE	7	
D708		MA3100L	DIODE	1	
D709		MA77	DIODE	1	
D771		MA141WK	DIODE	1	
D772,73		MA141K	DIODE	2	
D801,02		1SS254	DIODE	2	
D804		1SS254	DIODE	1	
D1001-03		11ES1	DIODE	3	
D1004		MA723VT	DIODE	1	(VT)
D2001		MA723VT	DIODE	1	(VT)
D2003		1SS254	DIODE	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
D2005-08		1SS254	DIODE	4	
D2011		1SS254	DIODE	1	
D3001		1SS254	DIODE	1	
D3002		11EQS04	DIODE	1	
D3005		MA151K	DIODE	1	
D3007		1SS254	DIODE	1	
D3008		MA221	DIODE	1	
D4001,02		1SS254	DIODE	2	
D4003		MA151WK	DIODE	1	
D4006		1SS254	DIODE	1	
D4007		MA723VT	DIODE	1	(VT)
D4501,02		MA151H	DIODE	2	
D4503		MA151K	DIODE	1	
D4504		MA151H	DIODE	1	
D4602		MA151K	DIODE	1	
D6001-05		1SS254	DIODE	5	
D6007		1SS254	DIODE	1	
D6008,09		MA723VT	DIODE	2	(VT)
D6011		1SS254	DIODE	1	
D6012		SV03YS	DIODE	1	
D7001-04		MA723VT	DIODE	4	(VT)
D7005		1SS254	DIODE	1	
D7007		1SS254	DIODE	1	
D7009		MA151WK	DIODE	1	
D7011		MA151WK	DIODE	1	
D7013		1SS254	DIODE	1	
D7014		MA151K	DIODE	1	
D7015-19		1SS254	DIODE	5	
D7601		MA141K	DIODE	1	
D7602		MA3082M	DIODE	1	
D7901,02		MA141WK	DIODE	2	
D7904		MA141K	DIODE	1	
D7905		MA141WA	DIODE	1	
D7906		MA141WK	DIODE	1	
D7907		MA141K	DIODE	1	
			DELAYS		
DL801		VLD0198	DELAY	1	
			FILTERS		
FL7901		VLF0702	FILTER	1	
FL7902		ELKAW103EB	FILTER	1	
FL7903		ELKAW101GB	COIL 100UH	1	
FL7904,05		ELKAW103EB	FILTER	2	
FL7907-11		ELKAW103EB	FILTER	5	
FL7914,15		ELKAW101GB	COIL 100UH	2	
FL7916		VLF0633	FILTER	1	
FL8001		VLF0936	FILTER	1	
FL8002		ELB4L149	FILTER	1	
			INTEGRATED CIRCUITS		
IC301		VEFH29B	IC	1	
IC601		M35010-055SP	IC	1	
IC602		M37471-V1AV	IC	1	
IC603		TA75S393F	IC	1	
IC701		LA7577	IC	1	
IC702		LA7975	IC	1	
IC801		NJM2233BMA	IC	1	
IC802		M52352FP	IC	1	
IC2001		BA6219B	IC	1	
IC2002		AN3727S	IC	1	
IC2003		XRA6439P	IC	1	
IC2005		UPC358G2	IC	1	
IC3001		NJM2233BMA	IC	1	
IC4501		XLH7770KS	IC	1	
IC4601		BA7755AF	IC	1	
IC6001		MN67434VRSA	IC	1	
IC6009		UPC358G2	IC	1	
IC7001		M66006FP	IC	1	
IC7652		AN5043SC	IC	1	
IC7901		TB1204F	IC	1	
IC7902		TA2009F	IC	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
IC7903		M5238FP	IC	1	
IC8001		BA7049FS	IC	1	
			COILS		
L303		ELESQ220KA	COIL 22UH	1	
L304		ELESQ101KA	COIL 100UH	1	
L305		ELESP121JA	COIL 120UH	1	
L306		ELESQ390KA	COIL 39UH	1	
L601		ELESQ101KA	COIL 100UH	1	
L602		ELESQ150KA	COIL 15UH	1	
L701		ELESQ680KA	COIL 68UH	1	
L711		ELJNAR39KF	COIL 0.39UH	1	
L712-16		ELJFA151KB	COIL 150UH	5	
L718		ELJNA1R0JF	COIL 1UH	1	
L719		ELESQ5R6KA	COIL 5.6UH	1	
L721		ELJFA151KB	COIL 150UH	1	
L723		ELJFA151KB	COIL 150UH	1	
L724		ELJNAR27KF	COIL 0.27UH	1	
L751		ELJFA100KB	COIL 10UH	1	
L752		ELESQ270KA	COIL 27UH	1	
L770		ELESQ680KA	COIL 68UH	1	
L803		ELESQ220KA	COIL 22UH	1	
L804		ELESQ101KA	COIL 100UH	1	
L805		ELESQ270KA	COIL 27UH	1	
L807,08		VLQ0540J150	COIL 15UH	2	
L809		ELESQ101KA	COIL 100UH	1	
L811,12		ELESQ101KA	COIL 100UH	2	
L1001		VLP0074	COIL	1	
L2001		VLP0083	FILTER	1	
L2002		VLQ0188J330	COIL 33UH	1	
L2003		ELESQ102KA	COIL 1000UH	1	
L2004		ELESQ101KA	COIL 100UH	1	
L2005		VLP0074	COIL	1	
L2006		VLQ0188J330	COIL 33UH	1	
L3001		VLQ0188J330	COIL 33UH	1	
L3002		ELESQ680JA	COIL 68UH	1	
L3004		VLQ0188J330	COIL 33UH	1	
L3005		ELESQ270JA	COIL 27UH	1	
L3007		ELESQ6R8JA	COIL 6.8UH	1	
L3008		ELESQ5R6JA	COIL 5.6UH	1	
L3009		ELESQ120JA	COIL 12UH	1	
L3010		ELESQ101JA	COIL 100UH	1	
L3011		VLQ0188J330	COIL 33UH	1	
L3012		ELESQ151KA	COIL 150UH	1	
L3013		ELESQ820JA	COIL 82UH	1	
L4001,02		VLQEL06F101K	COIL 100UH	2	
L4003		ELESQ471KA	COIL 470UH	1	
L4004		VLQ0188J330	COIL 33UH	1	
L4501,02		ELESQ101KA	COIL 100UH	2	
L4601		VLQEL07F153J	COIL 15MH	1	
L6001		VLP0074	COIL	1	
L7001		ELESQ3R3KA	COIL 3.3UH	1	
L7002		ELESQ1R0KA	COIL 1UH	1	
L7003		VLQ0188J330	COIL 33UH	1	
L7004		VLQ0540J330	COIL 33UH	1	
L7007		VLQ0188J330	COIL 33UH	1	
L7008		ELESQ1R0KA	COIL 1UH	1	
L7010		VLQEL06F101K	COIL 100UH	1	
L7012		VLQ0555	COIL	1	
L7901,02		VLP0083	FILTER	2	
L8002		ELESQ101KA	COIL 100UH	1	
L8003		ELESQ221KA	COIL 220UH	1	
L8004		VLQ0188J470	COIL 47UH	1	
			CONNECTORS		
P1001		VJP1144	CONNECTOR (MALE) 6P	1	
P1001		VJS1144	CONNECTOR (FEMALE) 6P	1	
P1002		VJP1141	CONNECTOR (MALE) 2P	1	
P1002		VJS1141	CONNECTOR (FEMALE) 2P	1	
P1003		VJP1232T	CONNECTOR (MALE) 5P	1	
P1003		VJS1232	CONNECTOR (FEMALE) 5P	1	
P1102		VJS1237T	CONNECTOR (FEMALE) 10P	1	
P1506		VJS1230	CONNECTOR (FEMALE) 3P	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
P1509		VJS1141	CONNECTOR (FEMALE) 2P	1	
P2001		VJP1232T	CONNECTOR (MALE) 5P	1	
P2001		VJS1232	CONNECTOR (FEMALE) 5P	1	
P2002		VJP1230T	CONNECTOR (MALE) 3P	1	
P2002		VJS1230	CONNECTOR (FEMALE) 3P	1	
P2003		VJS3193A015A	CONNECTOR (FEMALE) 5P	1	
P2902		VJS1232	CONNECTOR (FEMALE) 5P	1	
P3001		VJS3193A020A	CONNECTOR (FEMALE)	1	
P4002		VJP1230T	CONNECTOR (MALE) 3P	1	
P4002		VJS1230	CONNECTOR (FEMALE) 3P	1	
P4003		VJS2331	CONNECTOR (FEMALE) 6P	1	
P4012		VJP3092	CONNECTOR (MALE) 12P	1	
P4012		VJS3080	CONNECTOR (FEMALE) 12P	1	
P4014		VJP1932T	CONNECTOR (MALE) 15P	1	
P4014		VJS1932	CONNECTOR (FEMALE) 15P	1	
P4301		VJS3080	CONNECTOR (FEMALE) 12P	1	
P4305		VJS1932	CONNECTOR (FEMALE) 15P	1	
P6001		VJS3193A013A	CONNECTOR (FEMALE)	1	
P6002		VJP1242T	CONNECTOR (MALE) 2P	1	
P6005		VJP1239T	CONNECTOR (MALE) 12P	1	
P6005		VJS1239	CONNECTOR (FEMALE) 12P	1	
P6501		VJS1239	CONNECTOR (FEMALE) 12P	1	
P7401		VJS3193A012A	CONNECTOR (FEMALE)	1	
P7402		VJS3193A024A	CONNECTOR (FEMALE)	1	
PK7901,02		VJR0477	PACK PIN	2	
PP601		VJP3043A006W	CONNECTOR (MALE) 6P	1	
PP801		VJP3043A005W	CONNECTOR (MALE) 5P	1	
PP802		VJP3043G003W	CONNECTOR (MALE)	1	
PP803		VJP3043G007W	CONNECTOR (MALE)	1	
PP3001		VJP3044G009W	CONNECTOR (MALE)	1	
PP3002		VJP3044G012W	CONNECTOR (MALE)	1	
PP3003		VJP3044G006W	CONNECTOR (MALE)	1	
PP3005		VJP3042A016W	CONNECTOR (MALE)	1	
PP3006		VJP3042G017W	CONNECTOR (MALE)	1	
PP4001-03		VJP3186A018	CONNECTOR (MALE)	3	
PP7401-03		VJP3043A005W	CONNECTOR (MALE) 5P	3	
PP7404		VJP3043G007W	CONNECTOR (MALE)	1	
PP7405		VJP3043A006W	CONNECTOR (MALE) 6P	1	
PP7406		VJP3043G012W	CONNECTOR (MALE)	1	
PS301		VJS3044F009W	CONNECTOR (FEMALE)	1	
PS302		VJS3044F012W	CONNECTOR (FEMALE)	1	
PS303		VJS3044F006W	CONNECTOR (FEMALE)	1	
PS601		VJS3043B006W	CONNECTOR (FEMALE) 6P	1	
PS602		VJS3043F012W	CONNECTOR (FEMALE)	1	
PS701-03		VJS3043B005W	CONNECTOR (FEMALE) 5P	3	
PS704		VJS3043F007W	CONNECTOR (FEMALE)	1	
PS801		VJS3043B005W	CONNECTOR (FEMALE) 5P	1	
PS802		VJS3043F003W	CONNECTOR (FEMALE)	1	
PS803		VJS3043F007W	CONNECTOR (FEMALE)	1	
PS4001-03		VJS3186B018	CONNECTOR (FEMALE)	3	
			TRANSISTORS		
Q601		MSB709	TRANSISTOR	1	
Q703		MSD601-S	TRANSISTOR	1	
Q712		2SD1996-R	TRANSISTOR	1	
Q713		2SD1979-S	TRANSISTOR	1	
Q714		2SB1218-QR	TRANSISTOR	1	
Q715		2SD1820	TRANSISTOR	1	
Q716		2SC3931-C	TRANSISTOR	1	
Q717		2SC2377	TRANSISTOR	1	
Q771		MSD601-S	TRANSISTOR	1	
Q2001		MSB709	TRANSISTOR	1	
Q3001		MSB709	TRANSISTOR	1	
Q3002		MSC2295	TRANSISTOR	1	
Q3003		MSB709	TRANSISTOR	1	
Q3004		MSC2295	TRANSISTOR	1	
Q3006		MSC2295	TRANSISTOR	1	
Q3007		MSD601	TRANSISTOR-RESISTOR	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
Q3009		MSD601	TRANSISTOR-RESISTOR	1	
Q3010		2SB710-R	TRANSISTOR	1	(R,S)
Q4001		2SB710-R	TRANSISTOR	1	(R,S)
Q4002		2SB1321-R	TRANSISTOR	1	(R,S)
Q4003		2SD602A-R	TRANSISTOR	1	
Q4004,05		MSD601	TRANSISTOR-RESISTOR	2	
Q4006		MSB709	TRANSISTOR	1	
Q4007		2SB1378-R	TRANSISTOR	1	
Q4008		2SB1321-R	TRANSISTOR	1	(R,S)
Q4009		MSD601	TRANSISTOR-RESISTOR	1	
Q4501		2SD655	TRANSISTOR	1	
Q4551		2SB561	TRANSISTOR	1	
Q4601		MSD1328	TRANSISTOR	1	
Q6001		MSD601	TRANSISTOR-RESISTOR	1	
Q6002		2SD1991A	TRANSISTOR	1	
Q6003		MSB709	TRANSISTOR	1	
Q6004		2SD655	TRANSISTOR	1	
Q6005		MSD601	TRANSISTOR-RESISTOR	1	
Q6006		MSB709	TRANSISTOR	1	
Q7901,02		MSD601	TRANSISTOR-RESISTOR	2	
Q7903		2SC3931CD	TRANSISTOR	1	
Q7904-07		2SB1219	TRANSISTOR	4	
Q7908,09		2SC3929	TRANSISTOR	2	
Q7910		2SD1820	TRANSISTOR	1	
Q7913		2SB1218-Q	TRANSISTOR	1	
Q7914,15		2SD1979-S	TRANSISTOR	2	
Q7916		2SB1219	TRANSISTOR	1	
Q8001		MSD601	TRANSISTOR-RESISTOR	1	
			COMBINATION PARTS		
QR303		MRN2404	TRANSISTOR-RESISTOR	1	
QR306		MRN1404	TRANSISTOR-RESISTOR	1	
QR601		XN4312	TRANSISTOR-TRANSISTOR	1	
QR701-03		UN5213	TRANSISTOR	3	
QR704,05		XN4212	TRANSISTOR-RESISTOR	2	
QR706		UN5212	TRANSISTOR-RESISTOR	1	
QR707-09		XN4213	TRANSISTOR-RESISTOR	3	
QR711,12		UN5213	TRANSISTOR	2	
QR715		UN5213	TRANSISTOR	1	
QR717		UN5213	TRANSISTOR	1	
QR804		MRN2404	TRANSISTOR-RESISTOR	1	
QR805,06		MRN1404	TRANSISTOR-RESISTOR	2	
QR1001		XN1211	DIGITAL TRANSISTOR	1	
QR2001		XN1213	TRANSISTOR-TRANSISTOR	1	
QR2002		MRN2404	TRANSISTOR-RESISTOR	1	
QR3001		MRN2402	TRANSISTOR-RESISTOR	1	
QR3002		DTC363EK	COMBI.TR-R	1	
QR3005		MRN1403	TRANSISTOR-RESISTOR	1	
QR3006		MRN2402	TRANSISTOR-RESISTOR	1	
QR3007		DTC363EK	COMBI.TR-R	1	
QR4001		DTC363EK	COMBI.TR-R	1	
QR4002		XN1111	DIGITAL TRANSISTOR	1	
QR4005		MRN1404	TRANSISTOR-RESISTOR	1	
QR4007		MRN1404	TRANSISTOR-RESISTOR	1	
QR4008		XN4312	TRANSISTOR-TRANSISTOR	1	
QR4010		XN1211	DIGITAL TRANSISTOR	1	
QR4012		MRN2404	TRANSISTOR-RESISTOR	1	
QR4508,09		MRN2404	TRANSISTOR-RESISTOR	2	
QR4510		MRN1403	TRANSISTOR-RESISTOR	1	
QR4602		MRN2402	TRANSISTOR-RESISTOR	1	
QR4603		MRN1404	TRANSISTOR-RESISTOR	1	
QR6002		MRN1404	TRANSISTOR-RESISTOR	1	
QR6003		XN1211	DIGITAL TRANSISTOR	1	
QR6004		UN2114	TRANSISTOR-RESISTOR	1	
QR6005		MRN1404	TRANSISTOR-RESISTOR	1	
QR6010,11		MRN1404	TRANSISTOR-RESISTOR	2	
QR7003,04		MRN1404	TRANSISTOR-RESISTOR	2	
QR7005		MRN1403	TRANSISTOR-RESISTOR	1	
QR7006		MRN2402	TRANSISTOR-RESISTOR	1	
QR7601		UN5213	TRANSISTOR	1	
QR7901,02		UN5213	TRANSISTOR	2	
QR7903		UN5112	TRANSISTOR-RESISTOR	1	
QR7904		UN5214	TRANSISTOR-RESISTOR	1	
QR7905,06		UN5213	TRANSISTOR	2	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
			RESISTORS		
R304		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R307		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R308		ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R310		ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R312		ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R315		ERJ6GMYJ393	M.RESISTOR CH 1/10W 39K	1	
R316		ERJ6GMYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R318,19		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	2	
R322		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R327		ERJ6GEYK125	M.RESISTOR CH 1/10W 1.2M	1	
R606		ERJ6GMYJ104	M.RESISTOR CH 1/10W 100K	1	
R607		ERJ6GMYJ273	M.RESISTOR CH 1/10W 27K	1	
R608		ERJ6GMYJ183	M.RESISTOR CH 1/10W 18K	1	
R610-13		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	4	
R614		ERJ6GMYJ563	M.RESISTOR CH 1/10W 56K	1	
R615		ERJ6GMYJ682	M.RESISTOR CH 1/10W 6.8K	1	
R616,17		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	2	
R631		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R632		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R633-35		ERDS2TJ102	C.RESISTOR 1/4W 1K	3	
R636		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R637		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R638		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R639		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R701		ERJ3GEYJ682	M.RESISTOR CH 1/16W 6.8K	1	
R702		ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
R703		ERJ3GEYJ183	M.RESISTOR CH 1/16W 18K	1	
R704		ERJ3GEYJ152	M.RESISTOR 1/16W 1.5K	1	
R705		ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
R706		ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R707		ERJ3GEYJ272	M.RESISTOR CH 1/16W 2.7K	1	
R709		ERJ3GEYJ183	M.RESISTOR CH 1/16W 18K	1	
R710		ERJ3GEYJ122	M.RESISTOR CH 1/16W 1.2K	1	
R712		ERJ3GEYJ105	M.RESISTOR CH 1/16W 1M	1	
R713		ERJ3GEYJ184	M.RESISTOR CH 1/16W 180K	1	
R714		ERJ3GEYJ154	M.RESISTOR CH 1/16W 150K	1	
R715		ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R716		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R717		ERJ3GEYJ121	M.RESISTOR CH 1/16W 120	1	
R718		ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R720		ERJ3GEYJ102	M.RESISTOR 1/16W 1K	1	
R721-23		ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	3	
R724		VRE0040E471	M.RESISTOR CH 1/10W 470	1	
R725		ERJ3GEYJ271	M.RESISTOR CH 1/16W 270	1	
R726		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R727		ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R728		ERJ3GEYJ152	M.RESISTOR 1/16W 1.5K	1	
R729-32		ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	4	
R733		ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R734		ERJ3GEYJ562	M.RESISTOR CH 1/16W 5.6K	1	
R735		ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	1	
R736		ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R737		ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	1	
R738		ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R748		VRE0040E151	M.RESISTOR CH 1/10W 150	1	
R751,52		ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	2	
R753		ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	1	
R756		ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R758		ERJ3GEYJ102	M.RESISTOR 1/16W 1K	1	
R759		ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
R760		ERJ3GEYJ562	M.RESISTOR CH 1/16W 5.6K	1	
R761		ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	1	
R763,64		ERJ3GEYJ272	M.RESISTOR CH 1/16W 2.7K	2	
R765		ERJ3GEYJ682	M.RESISTOR CH 1/16W 6.8K	1	
R766		ERJ3GEYJ152	M.RESISTOR 1/16W 1.5K	1	
R767		ERJ3GEYJ332	M.RESISTOR 1/16W 3.3K	1	
R768		ERJ3GEYJ122	M.RESISTOR CH 1/16W 1.2K	1	
R769		ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	1	
R770,71		ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	2	
R772		ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R773		ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	1	
R774		ERJ3GEYJ562	M.RESISTOR CH 1/16W 5.6K	1	
R775		ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R776		ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	1	
R777		ERJ6GEYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R778		ERJ6GEYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R779		ERJ3GEYJ820	M.RESISTOR CH 1/16W 82	1	
R792		ERJ3GEYJ120	M.RESISTOR CH 1/16W 12	1	
R793		ERJ3GEYJ102	M.RESISTOR 1/16W 1K	1	
R794		ERJ6GEYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R813		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R814		ERJ6GMYJ393	M.RESISTOR CH 1/10W 39K	1	
R815		ERJ6GMYJ821	M.RESISTOR CH 1/10W 820	1	
R816		ERJ6GMYJ471	M.RESISTOR CH 1/10W 470	1	
R817		ERJ6GMYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R818		ERJ6GMYJ681	M.RESISTOR CH 1/10W 680	1	
R819		ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R820,21		ERJ6GMYJ122	M.RESISTOR CH 1/10W 1.2K	2	
R822		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R823,24		ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	2	
R827		ERJ6GMYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R828		ERJ6GMYJ271	M.RESISTOR CH 1/10W 270	1	
R829		ERJ6GMYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R830		ERJ6GMYJ271	M.RESISTOR CH 1/10W 270	1	
R831		ERJ6GMYJ681	M.RESISTOR CH 1/10W 680	1	
R832		ERJ6GMYJ154	M.RESISTOR CH 1/10W 150K	1	
R833		ERJ6GMYJ204	M.RESISTOR CH 1/10W 200K	1	
R834		ERJ6GMYJ153	M.RESISTOR CH 1/10W 15K	1	
R835		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R836		ERJ6GMYJ154	M.RESISTOR CH 1/10W 150K	1	
R848		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R849		ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R850		ERJ6GMYJ563	M.RESISTOR CH 1/10W 56K	1	
R853		ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R855		ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R857		ERJ6GMYJ101	M.RESISTOR 1/10W 100	1	
R858		ERJ6GMYJ561	M.RESISTOR CH 1/10W 560	1	
R859		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R1001		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R2001		ERJ6GMYJ104	M.RESISTOR CH 1/10W 100K	1	
R2002		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R2003		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R2004		ERG12SJ561	M.RESISTOR 1/2W 560	1	
R2005		ERJ6GMYG821	M.RESISTOR CH 1/10W 820	1	
R2006		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R2007		ERJ6GMYG432	M.RESISTOR CH 1/10W 4.3K	1	
R2008		ERJ6GMYG473	M.RESISTOR CH 1/10W 47K	1	
R2012		ERJ6GMYJ684	M.RESISTOR CH 1/10W 680K	1	
R2013		ERJ6GMYG103	M.RESISTOR CH 1/10W 10K	1	
R2014		ERJ6GMYG133	M.RESISTOR CH 1/10W 13K	1	
R2015		ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R2016		ERJ6GMYJ105	M.RESISTOR CH 1/10W 1M	1	
R2017		EROS2CKG6800	M.RESISTOR 1/4W 680	1	
R2018		ERX12SJR47	M.RESISTOR CH 1/2W 0.47	1	
R2019-21		ERDS2TJ560	C.RESISTOR 1/4W 56	3	
R2022		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R2023		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R2024		ERJ6GMYJ563	M.RESISTOR CH 1/10W 56K	1	
R2030		ERJ6GMYJ683	M.RESISTOR CH 1/10W 68K	1	
R2031		ERJ6GMYJ563	M.RESISTOR CH 1/10W 56K	1	
R2032		ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
R2034		ERJ6GMYJ682	M.RESISTOR CH 1/10W 6.8K	1	
R2035,36		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	2	
R2037		ERJ6GMYJ244	M.RESISTOR CH 1/10W 240K	1	
R2038		ERJ6GMYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R2039		ERJ6GMYJ105	M.RESISTOR CH 1/10W 1M	1	
R2040,41		ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	2	
R2042		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R2043		ERJ6GMYJ105	M.RESISTOR CH 1/10W 1M	1	
R2044		ERJ6GMYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R2045		ERJ6GMYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R2046		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R2047,48		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	2	
R2049		ERJ6GMYJ683	M.RESISTOR CH 1/10W 68K	1	
R2050		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R2051		ERJ6GMYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R2052		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R2053,54		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	2	
R2055		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R2056		ERX1SJ1R8	M.RESISTOR 1W 1.8	1	
R2057		ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
R2058		ERJ6GMYJ153	M.RESISTOR CH 1/10W 15K	1	
R3001		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
R3002		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R3003		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R3004		ERJ6GMYJ561	M.RESISTOR CH 1/10W 560	1	
R3005		ERJ6GMYJ391	M.RESISTOR CH 1/10W 390	1	
R3006		ERJ6GMYJ561	M.RESISTOR CH 1/10W 560	1	
R3007		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R3014		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R3018		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3019		ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R3021		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R3023		ERJ6GMYJ471	M.RESISTOR CH 1/10W 470	1	
R3024		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R3025		ERJ6GMYJ821	M.RESISTOR CH 1/10W 820	1	
R3026		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R3027		ERJ6GMYJ821	M.RESISTOR CH 1/10W 820	1	
R3028		ERJ6GMYJ750	M.RESISTOR CH 1/10W 75	1	
R3029		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R3031		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R3032		ERJ6GMYJ104	M.RESISTOR CH 1/10W 100K	1	
R3033		ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R3034		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R3035		ERJ6GMYJ561	M.RESISTOR CH 1/10W 560	1	
R3037		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3038		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R3039		ERJ6GMYJ681	M.RESISTOR CH 1/10W 680	1	
R3040,41		ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	2	
R3042		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3043		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R3049		ERJ6GMYJ101	M.RESISTOR 1/10W 100	1	
R4001		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R4002		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R4003		ERJ6GMYJ273	M.RESISTOR CH 1/10W 27K	1	
R4004		ERJ6GMYG432	M.RESISTOR CH 1/10W 4.3K	1	
R4005		ERJ6GMYJ244	M.RESISTOR CH 1/10W 240K	1	
R4006		ERJ6GMYG683	M.RESISTOR CH 1/10W 68K	1	
R4007		ERJ6GMYG100	M.RESISTOR CH 1/10W 10	1	
R4008,09		ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	2	
R4010		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R4011		ERDS2TJ471	C.RESISTOR 1/4W 470	1	
R4013		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R4014		ERJ6GMYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R4015		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R4016		ERJ6GMYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R4017		ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R4019		ERJ6GMYJ153	M.RESISTOR CH 1/10W 15K	1	
R4020		ERJ6GMYJ123	M.RESISTOR CH 1/10W 12K	1	
R4021		ERJ6GMYJ153	M.RESISTOR CH 1/10W 15K	1	
R4022		ERJ6GMYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R4024		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R4025		ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
R4026		ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R4028		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R4029		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R4032		ERJ6GMYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R4033,34		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	2	
R4035,36		ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	2	
R4037		ERJ6GMYJ104	M.RESISTOR CH 1/10W 100K	1	
R4038		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R4501,02		ERJ3GEYG363	M.RESISTOR CH 1/16W 36K	2	
R4503		VRE0071E36C	M.RESISTOR 1/10W	1	
R4504,05		ERJ6GEYJ393	M.RESISTOR CH 1/10W 39K	2	
R4506,07		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	2	
R4508		ERJ6GEYG224	M.RESISTOR CH 1/10W 220K	1	
R4509		ERJ6GEYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R4511		ERJ6GEYG303	M.RESISTOR CH 1/10W 30K	1	
R4512		VRE0034E163	M.RESISTOR CH 1/10W 16K	1	
R4513		ERJ3GEYG103	M.RESISTOR CH 1/16W 10K	1	
R4514		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R4518,19		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	2	
R4522		ERJ6GEYJ225	M.RESISTOR CH 1/10W 2.2M	1	
R4527		VRE0034E333	M.RESISTOR CH 1/10W 33K	1	
R4528		VRE0034E153	M.RESISTOR CH 1/10W 15K	1	
R4529		ERJ6GEYG562	M.RESISTOR CH 1/10W 5.6K	1	
R4530		ERJ3GEYJ334	M.RESISTOR CH 1/16W 330K	1	
R4534		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R4535		ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R4539		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R4540		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R4541		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R4542		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R4543		ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	1	
R4551,52		ERJ3GEYJ393	M.RESISTOR CH 1/16W 39K	2	
R4553		ERJ6GEYJ273	M.RESISTOR CH 1/10W 27K	1	
R4554		ERJ3GEYJ273	M.RESISTOR CH 1/16W 27K	1	
R4558		ERJ6GEYG224	M.RESISTOR CH 1/10W 220K	1	
R4561		ERJ6GEYG303	M.RESISTOR CH 1/10W 30K	1	
R4562		VRE0034E10C	M.RESISTOR 1/10W	1	
R4563		ERJ3GEYG272	M.RESISTOR CH 1/16W 2.7K	1	
R4568		ERJ6GEYJ273	M.RESISTOR CH 1/10W 27K	1	
R4569		ERJ3GEYJ273	M.RESISTOR CH 1/16W 27K	1	
R4572		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R4573		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R4577		ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R4578		VRE0034E473	M.RESISTOR CH 1/10W 47K	1	
R4581		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R4584		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R4585		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R4586		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R4587,88		ERJ3GEYJ273	M.RESISTOR CH 1/16W 27K	2	
R4591		ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R4592		ERJ6GEYJ563	M.RESISTOR CH 1/10W 56K	1	
R4593		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R4594		ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R4603		ERJ3GEYG183	M.RESISTOR CH 1/16W 18K	1	
R4606		ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R4610		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R4611,12		ERJ6GEYJ331	M.RESISTOR CH 1/10W 330	2	
R4613		ERJ6GEYJ394	M.RESISTOR CH 1/10W 390K	1	
R4615		ERJ6GEYJ133	M.RESISOTR CH 1/10W 13K	1	
R4616		ERJ6GEYJ105	M.RESISTOR CH 1/10W 1M	1	
R4638		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R4649		ERJ3GEYG470	M.RESISTOR CH 1/16W 47	1	
R4651		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R4653		ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1	
R4654		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R4655		ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R4656		ERJ6GEYG243	M.RESISTOR CH 1/10W 24K	1	
R4657		ERJ6GEYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R4666		ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1	
R6001-04		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	4	
R6005-08		ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	4	
R6009		ERJ6GMYG332	M.RESISTOR CH 1/10W 3.3K	1	
R6010		ERJ6GMYG102	M.RESISTOR CH 1/10W 1K	1	
R6011		ERJ6GMYG112	M.REISITOR CH 1/10W 1.1K	1	
R6013		EROS2CKG2000	M.RESISTOR 1/4W 200	1	
R6014,15		ERJ6GMYG223	M.RESISTOR CH 1/10W 22K	2	
R6016		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R6017		ERJ6GMYJ271	M.RESISTOR CH 1/10W 270	1	
R6018		ERJ6GMYJ683	M.RESISTOR CH 1/10W 68K	1	
R6019		ERJ6GMYJ104	M.RESISTOR CH 1/10W 100K	1	
R6020		ERJ6GMYJ101	M.RESISTOR 1/10W 100	1	
R6021		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R6022		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R6023,24		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	2	
R6025,26		ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	2	
R6027		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R6028		ERJ6GMYJ224	M.RESISTOR CH 1/10W 220K	1	
R6029		ERJ6GMYJ104	M.RESISTOR CH 1/10W 100K	1	
R6030		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R6031		ERJ6GMYJ183	M.RESISTOR CH 1/10W 18K	1	
R6032,33		ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	2	
R6034		ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R6035,36		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	2	
R6037		ERJ6GMYJ562	M.RESISTOR CH 1/10W 5.6K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R6038		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R6039		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R6043		ERJ6GMYJ683	M.RESISTOR CH 1/10W 68K	1	
R6044		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R6045,46		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	2	
R6050,51		ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	2	
R6052,53		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	2	
R6054		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R6057		ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R6078		VRE0034E103	M.RESISTOR CH 1/10W 10K	1	
R6079		ERJ6GMYJ564	M.RESISTOR CH 1/10W 560K	1	
R6080		VRE0034E103	M.RESISTOR CH 1/10W 10K	1	
R6081		VRE0034E472	M.RESISTOR CH 1/10W 4.7K	1	
R6082		VRE0034E512	M.RESISTOR CH 1/10W 5.1K	1	
R7002		ERJ6GMYJ181	M.RESISTOR CH 1/10W 180	1	
R7004,05		ERJ6GMYJ151	M.RESISTOR CH 1/10W 150	2	
R7006,07		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	2	
R7009,10		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	2	
R7011		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R7013,14		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	2	
R7015,16		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	2	
R7018,19		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	2	
R7020		ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
R7024-26		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	3	
R7027		ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R7028		ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
R7032		ERJ6GMYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R7034,35		ERJ6GMYJ101	M.RESISTOR 1/10W 100	2	
R7671,72		ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	2	
R7673		ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R7674		ERJ3GEYJ124	M.RESISTOR CH 1/16W 120K	1	
R7675		ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R7676		ERG1SJ152	M.RESISTOR 1W 1.5K	1	
R7677		ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R7678		ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	1	
R7679		VRE0040E100	M.RESISTOR CH 1/10W 10	1	
R7680		ERJ3GEYJ102	M.RESISTOR 1/16W 1K	1	
R7691		ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R7695		ERJ3GEYJ562	M.RESISTOR CH 1/16W 5.6K	1	
R7696		ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R7901		ERJ3GEYJ471	M.RESISTOR CH 1/16W 470	1	
R7902		ERJ3GEYJ821	M.RESISTOR CH 1/16W 820	1	
R7903		ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	1	
R7904		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R7905		ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1	
R7906		ERJ6GEYJ150	M.RESISTOR CH 1/10W 15	1	
R7907		ERJ6GEYJ561	M.RESISTOR CH 1/10W 560	1	
R7908		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R7909-11		ERJ6GEYJ331	M.RESISTOR CH 1/10W 330	3	
R7913-15		ERJ3GEYJ682	M.RESISTOR CH 1/16W 6.8K	3	
R7917		ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R7918-21		ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	4	
R7922		ERJ3GEYJ563	M.RESISTOR CH 1/16W 56K	1	
R7923		ERJ3GEYJ394	M.RESISTOR CH 1/16W 390K	1	
R7924-26		ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	3	
R7927		ERJ3GEYJ562	M.RESISTOR CH 1/16W 5.6K	1	
R7928		ERJ3GEYJ102	M.RESISTOR 1/16W 1K	1	
R7929		ERJ3GEYJ563	M.RESISTOR CH 1/16W 56K	1	
R7930		ERJ3GEYJ394	M.RESISTOR CH 1/16W 390K	1	
R7931-33		ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	3	
R7934		ERJ3GEYJ562	M.RESISTOR CH 1/16W 5.6K	1	
R7935		ERJ3GEYJ102	M.RESISTOR 1/16W 1K	1	
R7936		ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	1	
R7937		ERJ3GEYJ393	M.RESISTOR CH 1/16W 39K	1	
R7938		ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
R7939		ERJ3GEYJ224	M.RESISTOR CH 1/16W 220K	1	
R7940		ERJ3GEYJ181	M.RESISTOR CH 1/16W 180	1	
R7941		ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	1	
R7942		ERJ3GEYJ393	M.RESISTOR CH 1/16W 39K	1	
R7943		ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R7944		ERJ3GEYJ392	M.RESISTOR CH 1/16W 3.9K	1	
R7945		ERJ3GEYJ822	M.RESISTOR CH 1/16W 8.2K	1	
R7946,47		ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	2	
R7948		ERJ3GEYJ332	M.RESISTOR 1/16W 3.3K	1	
R7949		ERJ3GEYJ822	M.RESISTOR CH 1/16W 8.2K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R7950		ERJ3GEYJ332	M.RESISTOR 1/16W 3.3K	1	
R7951		ERJ3GEYJ822	M.RESISTOR CH 1/16W 8.2K	1	
R7956		ERJ3GEYJ822	M.RESISTOR CH 1/16W 8.2K	1	
R7957		ERJ3GEYJ332	M.RESISTOR 1/16W 3.3K	1	
R7958,59		ERJ3GEYJ823	M.RESISTOR CH 1/16W 82K	2	
R7960,61		ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	2	
R7962,63		ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	2	
R7964		ERJ3GEYJ272	M.RESISTOR CH 1/16W 2.7K	1	
R7969-72		ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	4	
R7973-77		ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	5	
R7978		ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R7979		ERJ3GEYJ152	M.RESISTOR 1/16W 1.5K	1	
R7980		ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R7981,82		ERJ3GEYJ102	M.RESISTOR 1/16W 1K	2	
R7983		ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R7985		ERJ3GEYJ181	M.RESISTOR CH 1/16W 180	1	
R7987		ERJ3GEYJ563	M.RESISTOR CH 1/16W 56K	1	
R7988		ERJ3GEYJ121	M.RESISTOR CH 1/16W 120	1	
R7989		ERDS2TJ823	C.RESISTOR 1/4W 82K	1	
R8001		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R8001		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R8002		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R8002		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R8003		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R8003		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R8004		ERJ6GEYJ821	M.RESISTOR CH 1/10W 820	1	
R8005		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R8007		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R8008,09		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	2	
R8010		ERJ6GEYG911	M.RESISTOR CH 1/10W 910	1	
R8011		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R8014		ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1	
R8015		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R8016		ERJ6GEYJ181	M.RESISTOR CH 1/10W 180	1	
			TRANSFORMERS		
T703		EIV5EC063A	TRANSFORMER	1	
T704		EIV5EC040A	TRANSFORMER	1	
T711		EIS5EC008A	TRANSFORMER	1	
T4001		EIQ7QF013Q	TRANSFORMER	1	
			VARIABLE RESISTORS		
VR701		EVNCBAA00B23	V.RESISTOR	1	
VR751		EVNCBAA00B53	V.RESISTOR	1	
VR803		EVNCBAA00B14	V.RESISTOR	1	
VR2001		EVNDXAA00B54	V.RESISTOR 50K	1	
VR2006		EVNDXAA00B15	V.RESISTOR 100K	1	
VR2011		EVNDXAA00B15	V.RESISTOR 100K	1	
VR2018,19		EVNDXAA00B15	V.RESISTOR 100K	2	
VR3001		EVNDXAA00B23	V.RESISTOR 2K	1	
VR3012,13		EVNDXAA00B52	V.RESISTOR 500	2	
VR4001		EVNDXAA00B25	V.RESISTOR 200K	1	
VR4501		EVMECSA00B53	V.RESISTOR	1	
VR4502		EVMEASA00B24	V.RESISTOR	1	
VR4507		EVMEASA00B24	V.RESISTOR	1	
VR4509		EVMECSA00BY3	V.RESISTOR	1	
VR4550		EVMECSA00BS3	V.RESISTOR	1	
VR4551,52		EVMEASA00B55	V.RESISTOR	2	
VR7901,02		EVNCBAA00B14	V.RESISTOR	2	
VR7903		EVTEASA00B55	V.RESISTOR	1	
VR8001		EVNDXAA00B23	V.RESISTOR 2K	1	
			CRYSTAL OSCILLATORS		
X601		VSX0574	CRYSTAL OSCILLATOR	1	
X602		VSX0176	CRYSTAL OSCILLATOR	1	
X710		EFCH38MWV3	CRYSTAL OSCILLATOR	1	
X711		EFCT3F02W3B	CRYSTAL OSCILLATOR	1	
X712		EFCT6R0MS5	CRYSTAL OSCILLATOR	1	
X714		VSX0553	CRYSTAL OSCILLATOR	1	
X715		VSX0547	CRYSTAL OSCILLATOR	1	
X716		EFCS4504BFB	CRYSTAL OSCILLATOR	1	
X717		EFCT5744BF	CRYSTAL OSCILLATOR	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
X718		EFCH32MWP1	CRYSTAL OSCILLATOR	1	
X719		EFCS4504BFB	CRYSTAL OSCILLATOR	1	
X720		EFCS6004BF	CRYSTAL OSCILLATOR	1	
X801		VSX0162	CRYSTAL OSCILLATOR	1	
X6001		VSX0409	CRYSTAL OSCILLATOR	1	
X7901		VSX0513	CRYSTAL OSCILLATOR	1	
X7902		VSX0512	CRYSTAL OSCILLATOR	1	
X7903		EFCA6004BF	CRYSTAL OSCILLATOR	1	
X8001		VSX0473	CRYSTAL OSCILLATOR	1	
			MISCELLANEOUS		
		VEE8451	CONNECTOR	1	(P1001,3-P1102)
		VWJ0682A	FLAT CARD CABLE	1	(P3001-P501)
		VWJ0683A	FLAT CARD CABLE	1	(P2003-P1507)
		VWJ00B7A	FLAT CARD CABLE	1	(P6001-P1505)
		VWJ121W200BB	FLAT CARD CABLE	1	(P7401-P7501)
		VWJ240W160BB	FLAT CARD CABLE	1	(P7402-P7502)
		VJF1056	HARNESS LIFTER	1	
		VJF1001	WIRE SADDLE	1	
		VSC3553	SHIELD COVER (MAIN)	1	FOR NICAM DECODER
		VSC3554	SHIELD COVER (TOP)	1	FOR NICAM DECODER
		VSC3555	SHIELD COVER (BOTTOM)	1	FOR NICAM DECODER
	■	VEP03978A	INPUT/OUTPUT PACK C.B.A.		(RTL)
			CAPACITORS		
C3916,17		ECEA1CKA100	E.CAPACITOR 16V 10U	2	
C3918		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C3919		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
			INTEGRATED CIRCUITS		
IC3902		NJM2233BL	IC	1	
			COILS		
L3905		ELESQ101KA	COIL 100UH	1	
			CONNECTORS		
PS3005		VJS3042B016W	CONNECTOR (FEMALE)	1	
PS3006		VJS3042F017W	CONNECTOR (FEMALE)	1	
			RESISTORS		
R3903,04		ERJ6GEYJ750	M.RESISTOR CH 1/10W 75	2	
R4903,04		ERJ6GEYJ561	M.RESISTOR CH 1/10W 560	2	
R4907,08		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	2	
			MISCELLANEOUS		
		VEJ1224	JACK PLATE	1	
	■	VEX0126	CYLINDER DRIVE C.B.A.		(RTL)
			CAPACITORS		
C2901-03		ECEA1VSN2R2	E.CAPACITOR 35V 2.2U	3	
C2904-06		ECUM1E104KBM	C.CAPACITOR CH 25V 0.1U	3	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C2907		ECUM1E683KBM	C.CAPACITOR CH 25V 0.068U	1	
C2908		ECUM1E473KBM	C.CAPACITOR CH 25V 0.047U	1	
C2909		ECQV1H104JS	P.CAPACITOR 50V 0.1U	1	
C2910,11		ECEA1CKS100	E.CAPACITOR 16V 10U	2	
C2912		ECEA0JKS220	E.CAPACITOR 6.3V 22U	1	
			INTEGRATED CIRCUITS		
IC2901		AN3815K	IC	1	
			CONNECTORS		
P2901		VJP2603W	CONNECTOR (MALE)	1	
P2902		VJP1232T	CONNECTOR (MALE) 5P	1	
			RESISTORS		
R2901		ERX12SJR47	M.RESISTOR CH 1/2W 0.47	1	
			THERMISTORS		
TH2901		VRH0017	THERMISTOR	1	
	■	VEP01487Q	POWER C.B.A.		(RTL)<!>NV-HD100AM
			CAPACITORS		
C1102		ECQU2A104MN	P.CAPACITOR 250V 0.01U	1	<!>
C1103		ECEC2GG680B	CAPACITOR	1	
C1106		VCC0019	C.CAPACITOR 330P	1	<!>
C1107		ECQE6473KF	P.CAPACITOR 50V	1	
C1108		VCK0106K121	CAPACITOR	1	
C1109		ECA1VXLV470	E.CAPACITOR 35V 47U	1	
C1110		ECA1CXLV331	E.CAPACITOR 16V 330U	1	
C1111		ECEA1JFE470	E.CAPACITOR 63V 47U	1	
C1112		ECEA1CFE560	E.CAPACITOR 16V 56U	1	
C1113,14		ECEA1DFZ681	E.CAPACITOR 20V 680U	2	
C1115,16		ECEA1AFZ681X	E.CAPACITOR 10V 680U	2	
C1117		ECQB1H103JF	P.CAPACITOR 50V 0.01U	1	
C1118		ECKF1H102KB	C.CAPACITOR 50V 1000P	1	
C1119		VCF2AAC101J	P.CAPACITOR 100V 100P	1	
C1120		ECKF1H391KB	C.CAPACITOR 50V 390P	1	
C1121		ECKF1H102KB	C.CAPACITOR 50V 1000P	1	
C1133		VCC0019	C.CAPACITOR 330P	1	<!>
C1136		VCC0022	C.CAPACITOR 1000P	1	<!>
			DIODES		
D1101		ENB461D-05A	SURGE ABSORBER 460V	1	<!>
D1102		S1WBA60S	DIODE	1	<!>
D1103		AP01C	DIODE	1	
D1104		MA4200H	DIODE	1	
D1105		MA723VT	DIODE	1	(VT)
D1106		MA178	DIODE	1	
D1107		AU01Z	DIODE	1	
D1108		MA185	DIODE	1	
D1109		30DF2	DIODE	1	
D1110		31DQ04	DIODE	1	
D1111		MA165	DIODE	1	
			INTEGRATED CIRCUITS		
IC1101		STRS6545LF	IC	1	<!>
IC1102		SI3120C	IC	1	
IC1103		UPC1093J	IC	1	
			COILS		

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
L1102,03		VLQ0410	COIL	2	
L1104,05		ELESE101KA	COIL 100UH	2	
L1106		VLP0074	COIL	1	
L1107		VLP0083	FILTER	1	
L1111		ELF18D290A	COIL 29UH	1	<!>
L1116		VLP0085	FILTER	1	
L1118		VLP0085	FILTER	1	
			CONNECTORS		
P1101		VJS2625	CONNECTOR (FEMALE)	1	<!>
P1102		VJP1250T	CONNECTOR (MALE) 10P	1	
			TRANSISTORS		
Q1101		PS2561L1	TRANSISTOR-PHOTO COUPLER	1	<!>
			RESISTORS		
R1101		EROS2CKG3001	M.RESISTOR 1/4W 3K	1	
R1102		ERG3SJ683	M.RESISTOR 3W 68K	1	
R1103		ERDS2TJ224	C.RESISTOR 1/4W 220K	1	
R1104		ERDS2FJ221	C.RESISTOR 1/4W 220	1	
R1105		ERDS2TJ101	C.RESISTOR 1/4W 100	1	
R1106		ERDS2TJ561	C.RESISTOR 1/4W 560	1	
R1107		ERW1PKR82	W.RESISTOR 1W 0.082	1	
R1108		ERDS2TJ561	C.RESISTOR 1/4W 560	1	
R1109		ERDS2TJ271	C.RESISTOR 1/4W 270	1	
R1110		EROS2CKG2701	M.RESISTOR 1/4W 2.7K	1	
R1111		ERDS2TJ272	C.RESISTOR 1/4W 2.7K	1	
R1112		EROS2CKG2401	M.RESISTOR 1/4W 2.4K	1	
R1113		EROS2CKG3302	M.RESISTOR 1/4W 33K	1	
R1114		ERDS2TJ152	C.RESISTOR 1/4W 1.5K	1	
R1115		ERDS2TJ471	C.RESISTOR 1/4W 470	1	
R1116		EROS2CKG62R0	M.RESISTOR 62	1	
R1117		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R1131		ERW1PK2R2	W.RESISTOR 1W 2.2	1	
R1133		ERDS2TJ224	C.RESISTOR 1/4W 220K	1	
R1134		ERDS1TJ395	C.RESISTOR 1/2W 3900K	1	
R1135		ERDS1TJ475	C.RESISTOR 1/2W 4700K	1	
			TRANSFORMERS		
T1101		VLT0657	TRANSFORMER	1	<!>
			MISCELLANEOUS		
		VJF0318	FUSE HOLDER	2	<!>
	■	VEP01487P	POWER C.B.A.		(RTL)<!>NV-F125BD
			CAPACITORS		
C1101		ECQU2A224MN	P.CAPACITOR 250V 0.22U	1	<!>
C1102		ECQU2A104MN	P.CAPACITOR 250V 0.01U	1	<!>
C1103		ECEC2GG680B	CAPACITOR	1	
C1106		VCC0021	C.CAPACITOR	1	<!>
C1107		ECQE6473KF	P.CAPACITOR 50V	1	
C1108		VCK0106K121	CAPACITOR	1	
C1109		ECA1VXLV470	E.CAPACITOR 35V 47U	1	
C1110		ECA1CXLV331	E.CAPACITOR 16V 330U	1	
C1111		ECEA1JFE470	E.CAPACITOR 63V 47U	1	
C1112		ECEA1CFE560	E.CAPACITOR 16V 56U	1	
C1113,14		ECEA1DFZ681	E.CAPACITOR 20V 680U	2	
C1115,16		ECEA1AFZ681X	E.CAPACITOR 10V 680U	2	
C1117		ECQB1H103JF	P.CAPACITOR 50V 0.01U	1	
C1118		ECKF1H102KB	C.CAPACITOR 50V 1000P	1	
C1119		VCF2AAC101J	P.CAPACITOR 100V 100P	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C1120		ECKF1H391KB	C.CAPACITOR 50V 390P	1	
C1121		ECKF1H102KB	C.CAPACITOR 50V 1000P	1	
C1133		VCC0021	C.CAPACITOR	1	<!>
C1136		VCC0022	C.CAPACITOR 1000P	1	<!>
			DIODES		
D1102		S1WBA60S	DIODE	1	<!>
D1103		AP01C	DIODE	1	
D1104		MA4200H	DIODE	1	
D1105		MA723VT	DIODE	1	(VT)
D1106		MA178	DIODE	1	
D1107		AU01Z	DIODE	1	
D1108		MA185	DIODE	1	
D1109		30DF2	DIODE	1	
D1110		31DQ04	DIODE	1	
D1111		MA165.	DIODE	1	
			INTEGRATED CIRCUITS		
IC1101		STRS6545LF	IC	1	<!>
IC1102		SI3120C	IC	1	
IC1103		UPC1093J	IC	1	
			COILS		
L1101		ELF18D221F	COIL 220UH	1	<!>
L1102,03		VLQ0410	COIL	2	
L1104,05		ELESE101KA	COIL 100UH	2	
L1106		VLP0074	COIL	1	
L1107		VLP0083	FILTER	1	
L1111		ELF18D221F	COIL 220UH	1	<!>
L1116		VLP0085	FILTER	1	
L1118		VLP0085	FILTER	1	
			CONNECTORS		
P1101		VJS2625	CONNECTOR (FEMALE)	1	<!>
P1102		VJP1250T	CONNECTOR(MALE) 10P	1	
			TRANSISTORS		
Q1101		PS2561L1	TRANSISTOR-PHOTO COUPLER	1	<!>
			RESISTORS		
R1101		EROS2CKG3001	M.RESISTOR 1/4W 3K	1	
R1102		ERG3SJ683	M.RESISTOR 3W 68K	1	
R1103		ERDS2TJ224	C.RESISTOR 1/4W 220K	1	
R1104		ERDS2FJ221	C.RESISTOR 1/4W 220	1	
R1105		ERDS2TJ101	C.RESISTOR 1/4W 100	1	
R1106		ERDS2TJ561	C.RESISTOR 1/4W 560	1	
R1107		ERW1PKR82	W.RESISTOR 1W 0.082	1	
R1108		ERDS2TJ561	C.RESISTOR 1/4W 560	1	
R1109		ERDS2TJ271	C.RESISTOR 1/4W 270	1	
R1110		EROS2CKG2701	M.RESISTOR 1/4W 2.7K	1	
R1111		ERDS2TJ272	C.RESISTOR 1/4W 2.7K	1	
R1112		EROS2CKG2401	M.RESISTOR 1/4W 2.4K	1	
R1113		EROS2CKG3302	M.RESISTOR 1/4W 33K	1	
R1114		ERDS2TJ152	C.RESISTOR 1/4W 1.5K	1	
R1115		ERDS2TJ471	C.RESISTOR 1/4W 470	1	
R1116		EROS2CKG62R0	C.RESISTOR 1/4W 62	1	
R1117		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R1131		ERW1PK2R2	W.RESISTOR 1W 2.2	1	
R1132		ERC12AGM334	S.RESISTOR 1/2W 330K	1	<!>
R1133		ERDS2TJ224	C.RESISTOR 1/4W 220K	1	
R1134		ERDS1TJ395	C.RESISTOR 1/2W 3900K	1	
R1135		ERDS1TJ475	C.RESISTOR 1/2W 4700K	1	
			TRANSFORMERS		
T1101		VLT0657	TRANSFORMER	1	<!>
			MISCELLANEOUS		

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
		VJF0318	FUSE HOLDER	2	<!>
	■	VEP05176C	HEAD AMP C.B.A.		(RTL)
			CAPACITORS		
C503		ECUM1C105ZFN	C.CAPACITOR 16V 1U	1	
C505-08		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	4	
C509		ECUM1H332KBN	C.CAPACITOR CH 50V 3300P	1	
C510,11		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	2	
C512		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C513		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C514		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C515,16		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	2	
C517,18		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C519,20		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	2	
C521		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C523-25		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	3	
C526		VCEA0JAC221	E.CAPACITOR 6.3V 220U	1	
C527		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C540		ECEA1CK470	E.CAPACITOR 16V 47U	1	
C551		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C552-54		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	3	
C555		ECEA0JPK221	E.CAPACITOR 6.3V 220U	1	
C556,57		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C559		ECUM1C105ZFN	C.CAPACITOR 16V 1U	1	
C560,61		ECUM1H471JCN	C.CAPACITOR 50V 470P	2	
C562,63		ECUM1H101JCN	C.CAPACITOR CH 50V 100P	2	
C564		ECUM1C105ZFN	C.CAPACITOR 16V 1U	1	
C565		ECUM1H101JCN	C.CAPACITOR CH 50V 100P	1	
C566		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C567		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C569		ECUM1C105ZFN	C.CAPACITOR 16V 1U	1	
			INTEGRATED CIRUCITS		
IC501		AN3336SB	IC	1	
IC551		BA7743FS	IC	1	
			COILS		
L501,02		VLQ0540K330	COIL 33UH	2	
L551,52		VLQ0540K330	COIL 33UH	2	
			CONNECTORS		
P501		VJS3193B020A	CONNECTOR (FEMALE)	1	
P502		VJS2603	CONNECTOR (FEMALE) 12P	1	
			COMBINATION PARTS		
QR501		MRN2404	TRANSISTOR-RESISTOR	1	
			RESISTORS		
R501		ERJ6GMYJ101	M.RESISTOR 1/10W 100	1	
R502		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R503		ERJ6GMYG752	M.RESISTOR CH 1/10W 7.5K	1	
R504		ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
R505		ERJ6GMYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R506		ERJ6GMYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R507		ERJ6GMYJ391	M.RESISTOR CH 1/10W 390	1	
R508		ERJ6GMYJ331	M.RESISTOR CH 1/10W 330	1	
R509-12		ERJ6GMYJ101	M.RESISTOR 1/10W 100	4	
R513		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R514		ERJ6GMYJ274	M.RESISTOR CH 1/10W 270K	1	
R517		ERJ6GMYJ100	M.RESISTOR 1/10W 10	1	
R526		ERJ6GMYG133	M.RESISTOR CH 1/10W 13K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R551		ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R552		ERJ6GMYJ391	M.RESISTOR CH 1/10W 390	1	
R553		ERJ6GMYJ273	M.RESISTOR CH 1/10W 27K	1	
R554		ERJ6GMYJ243	M.RESISTOR CH 1/10W 24K	1	
R556		ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
R557		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R558		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R559,60		ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	2	
R561		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R562		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R563		VRE0034E100	M.RESISTOR CH 1/10W 10	1	
R564		ERJ6GMYJ224	M.RESISTOR CH 1/10W 220K	1	
R565		ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R566		ERJ6GMYJ273	M.RESISTOR CH 1/10W 27K	1	
R567		ERJ6GMYJ153	M.RESISTOR CH 1/10W 15K	1	
R568		ERJ6GMYJ271	M.RESISTOR CH 1/10W 270	1	
R569		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R570		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
			MISCELLANEOUS		
		VSC3714	SHIELD COVER (TOP)	1	
		VSC3478	SHIELD COVER (MAIN)	1	
		VSC3715	SHIELD COVER (BOTTOM)	1	
	■	VEP07704C	TIMER C.B.A.		(RTL)NV-HD100AM
			CAPACITORS		
C1701		ECEA1CK101	E.CAPACITOR 16V 100U	1	
C1702		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C1703		ECKD2H471KB	C.CAPACITOR 500V 470P	1	
C1704		ECEA1VK220	E.CAPACITOR 35V 22U	1	
C1705		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C1706		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C7501		ECRHA030E54R	CAPACITOR	1	
C7502		ECEA0JKS330	E.CAPACITOR 6.3V 33U	1	
C7503		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C7504		ECUM1H223KBN	C.CAPACITOR CH 50V 0.022U	1	
C7505,06		ECEA1EKS4R7	E.CAPACITOR 25V 4.7U	2	
C7507,08		ECUM1H473KBN	C.CAPACITOR CH 50V 0.047U	2	
C7509		ECEA1HK220	E.CAPACITOR 50V 22U	1	
C7510		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C7511		ECUM1H100DCN	C.CAPACITOR CH 50V 10P	1	
C7513		ECUM1H270JCN	C.CAPACITOR CH 50V 27P	1	
C7514		ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C7515		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
C7517		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C7518		ECUM1H821JCN	C.CAPACITOR CH 50V 820P	1	
C7519		ECUM1H221JCN	C.CAPACITOR CH 50V 220P	1	
C7520		ECEA0JKS470	E.CAPACITOR 6.3V 47U	1	
C7521		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C7522		ECEA0JKS470	E.CAPACITOR 6.3V 47U	1	
C7523-29		ECUM1H101JCN	C.CAPACITOR CH 50V 100P	7	
C7703		ECUM1C105ZFN	C.CAPACITOR 16V 1U	1	
C7704		ECEA1HPK010	E.CAPACITOR 50V 1U	1	
C7705		ECUM1H332KBN	C.CAPACITOR CH 50V 3300P	1	
			DIODES		
D1701		MA1270-H	DIODE	1	
D1702		MA185	DIODE	1	
D7501		MA3075	DIODE	1	
D7502		MA221	DIODE	1	
D7504		LN081609P	LED	1	
D7512-15		MA221	DIODE	4	
D7517-19		MA221	DIODE	3	
D7567-69		MA221	DIODE	3	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
D7571,72		MA221	DIODE	2	
D7577		MA221	DIODE	1	
D7580		MA221	DIODE	1	
D7586		MA221	DIODE	1	
D7701-03		MA221	DIODE	3	
D7704		MA153	DIODE	1	
			DISPLAY TUBES		
DP7501		VSL0276	DISPLAY TUBE	1	
			INTEGRATED CIRCUITS		
IC7501		M37502V4BB	IC	1	
IC7502		PST7026	IC	1	
IC7503		XLJ9021B	IC	1	
IC7504		PST7043	IC	1	
IC7505		BA6810S	IC	1	
IR7501		VEK6407	IR RECEIVER UNIT	1	
			COILS		
L1701		ELESQ101KA	COIL 100UH	1	
L7501		ELESQ151KA	COIL 150UH	1	
L7701		VLQ0188J330	COIL 33UH	1	
			CONNECTORS		
P7501		VJS3193B012A	CONNECTOR (FEMALE)	1	
P7502		VJS3193B024A	CONNECTOR (FEMALE)	1	
P7703		VJP1250T	CONNECTOR (MALE) 10P	1	
P7704		VJS2650A008Z	CONNECTOR (FEMALE)	1	
PP7501		VJP3405A013W	CONNECTOR (MALE)	1	
			TRANSISTORS		
Q1701		2SD973A-R.VT	TRANSISTOR	1	
Q7501,02		MSD601	TRANSISTOR-RESISTOR	2	
			COMBINATION PARTS		
QR7501,02		MRN2403	TRANSISTOR-RESISTOR	2	
QR7503		UN211D	TRANSISTOR-RESISTOR	1	
QR7505		MRN2403	TRANSISTOR-RESISTOR	1	
QR7509		MRN1404	TRANSISTOR-RESISTOR	1	
			RESISTORS		
R1701		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R1702		ERDS2TJ471	C.RESISTOR 1/4W 470	1	
R1703		ERJ6GMYJ101	M.RESISTOR 1/10W 100	1	
R7501,02		ERJ6GMYJ820	M.RESISTOR CH 1/10W 82	2	
R7503		ERJ6GMYG223	M.RESISTOR CH 1/10W 22K	1	
R7504		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R7505-07		ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	3	
R7508		ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R7510-13		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	4	
R7514		ERJ6GMYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R7515-18		ERJ6GMYJ821	M.RESISTOR CH 1/10W 820	4	
R7519		ERJ6GMYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R7520		ERJ6GMYJ101	M.RESISTOR 1/10W 100	1	
R7522		ERJ6GMYJ104	M.RESISTOR CH 1/10W 100K	1	
R7524		ERJ6GMYJ331	M.RESISTOR CH 1/10W 330	1	
R7525		ERJ6GMYK106	M.RESISTOR CH 1/10W 10M	1	
R7526		ERJ6GMYJ224	M.RESISTOR CH 1/10W 220K	1	
R7527,28		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	2	
R7529		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R7531,32		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	2	
R7534-37		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	4	
R7538,39		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	2	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R7540-43		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	4	
R7546		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R7549		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R7550		ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R7551		ERJ6GMYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R7553-56		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	4	
R7557		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R7704		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R7705		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R7706		ERJ6GMYJ153	M.RESISTOR CH 1/10W 15K	1	
R7707,08		ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	2	
			COMBINATION PARTS		
RX7501,02		EXBF6E104J	RESISTOR-RESISTOR	2	
RX7503		EXBF8E104J	COMBI.R-R	1	
			SWITCHES		
SW7501-11		EVQ11409K	SWITCH	11	
SW7701-06		EVQ11409K	SWITCH	6	
SW7707		ESD172352	SWITCH	1	
SW7708		ESD172252	SWITCH	1	
			TRANSFORMERS		
T1701		ETE13K80AY	TRANSFORMER	1	
			VARIABLE RESISTORS		
VR4004		EVNCBAA00B53	V.RESISTOR	1	
VR7701		EVUJF1F01C24	V.RESISTOR	1	
VR7702,03		EVUJF0F0153S	V.RESISTOR	2	
			CRYSTAL OSCILLATORS		
X7501		VSX0484	CRYSTAL OSCILLATOR	1	
X7502		VSX0094	CRYSTAL OSCILLATOR	1	
			MISCELLANEOUS		
		VGU6148	VR KNOB	3	
		VJF1045	VR HOLDER	1	
	■	VEP07704B	TIMER C.B.A.		(RTL)NV-F125BD
			CAPACITORS		
C1701		ECEA1CK101	E.CAPACITOR 16V 100U	1	
C1702		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C1703		ECKD2H471KB	C.CAPACITOR 500V 470P	1	
C1704		ECEA1VK220	E.CAPACITOR 35V 22U	1	
C1705		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C1706		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C7501		ECRHA030E54R	CAPACITOR	1	
C7502		ECEA0JKS330	E.CAPACITOR 6.3V 33U	1	
C7503		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C7504		ECUM1H223KBN	C.CAPACITOR CH 50V 0.022U	1	
C7505,06		ECEA1EKS4R7	E.CAPACITOR 25V 4.7U	2	
C7507,08		ECUM1H473KBN	C.CAPACITOR CH 50V 0.047U	2	
C7509		ECEA1HK220	E.CAPACITOR 50V 22U	1	
C7510		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C7511		ECUM1H100DCN	C.CAPACITOR CH 50V 10P	1	
C7513		ECUM1H270JCN	C.CAPACITOR CH 50V 27P	1	
C7514		ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C7515		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
C7517		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C7518		ECUM1H821JCN	C.CAPACITOR CH 50V 820P	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C7519		ECUM1H221JCN	C.CAPACITOR CH 50V 220P	1	
C7520		ECEA0JKS470	E.CAPACITOR 6.3V 47U	1	
C7521		ECUM1H1032FN	C.CAPACITOR CH 50V 0.01U	1	
C7522		ECEA0JKS470	E.CAPACITOR 6.3V 47U	1	
C7523-29		ECUM1H101JCN	C.CAPACITOR CH 50V 100P	7	
C7703		ECUM1C105ZFN	C.CAPACITOR 16V 1U	1	
C7704		ECEA1HPK010	E.CAPACITOR 50V 1U	1	
C7705		ECUM1H332KBN	C.CAPACITOR CH 50V 3300P	1	
			DIODES		
D1701		MA1270-H	DIODE	1	
D1702		MA185	DIODE	1	
D7501		MA3075	DIODE	1	
D7502		MA221	DIODE	1	
D7504		LN081609P	LED	1	
D7512-15		MA221	DIODE	4	
D7517-19		MA221	DIODE	3	
D7567-69		MA221	DIODE	3	
D7571,72		MA221	DIODE	2	
D7577		MA221	DIODE	1	
D7580		MA221	DIODE	1	
D7586		MA221	DIODE	1	
D7701-03		MA221	DIODE	3	
D7704		MA153	DIODE	1	
			DISPLAY TUBES		
DP7501		VSL0276	DISPLAY TUBE	1	
			INTEGRATED CIRCUITS		
IC7501		M37502V4BB	IC	1	
IC7502		PST7026	IC	1	
IC7503		XLJ9021B	IC	1	
IC7504		PST7043	IC	1	
IC7505		BA6810S	IC	1	
IR7501		VEK6407	IR RECEIVER UNIT	1	
			COILS		
L1701		ELESQ101KA	COIL 100UH	1	
L7501		ELESQ151KA	COIL 150UH	1	
L7701		VLQ0188J330	COIL 33UH	1	
			CONNECTORS		
P7501		VJS3193B012A	CONNECTOR (FEMALE)	1	
P7502		VJS3193B024A	CONNECTOR (FEMALE)	1	
P7703		VJP1250T	CONNECTOR (MALE) 10P	1	
P7704		VJS2571A008	CONNECTOR (FEMALE)	1	
PP7501		VJP3405A013W	CONNECTOR (MALE)	1	
			TRANSISTORS		
Q1701		2SD973A-R.VT	TRANSISTOR	1	
Q7501,02		MSD601	TRANSISTOR-RESISTOR	2	
			COMBINATION PARTS		
QR7501,02		MRN2403	TRANSISTOR-RESISTOR	2	
QR7503		UN211D	TRANSISTOR-RESISTOR	1	
QR7505		MRN2403	TRANSISTOR-RESISTOR	1	
QR7509		MRN1404	TRANSISTOR-RESISTOR	1	
			RESISTORS		
R1701		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R1702		ERDS2TJ471	C.RESISTOR 1/4W 470	1	
R1703		ERJ6GMYJ101	M.RESISTOR 1/10W 100	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R7501,02		ERJ6GMYJ820	M.RESISTOR CH 1/10W 82	2	
R7503		ERJ6GMYG223	M.RESISTOR CH 1/10W 22K	1	
R7504		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R7505-07		ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	3	
R7508		ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R7510-13		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	4	
R7514		ERJ6GMYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R7515-18		ERJ6GMYJ821	M.RESISTOR CH 1/10W 820	4	
R7519		ERJ6GMYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R7520		ERJ6GMYJ101	M.RESISTOR 1/10W 100	1	
R7522		ERJ6GMYJ104	M.RESISTOR CH 1/10W 100K	1	
R7524		ERJ6GMYJ331	M.RESISTOR CH 1/10W 330	1	
R7525		ERJ6GMYK106	M.RESISTOR CH 1/10W 10M	1	
R7526		ERJ6GMYJ224	M.RESISTOR CH 1/10W 220K	1	
R7527,28		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	2	
R7529		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R7531,32		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	2	
R7534-37		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	4	
R7538,39		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	2	
R7540-43		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	4	
R7546		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R7549		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R7550		ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R7551		ERJ6GMYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R7553-56		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	4	
R7557		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R7704		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R7705		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R7706		ERJ6GMYJ153	M.RESISTOR CH 1/10W 15K	1	
R7707,08		ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	2	
			COMBINATION PARTS		
RX7501,02		EXBF6E104J	RESISTOR-RESISTOR	2	
RX7503		EXBF8E104J	COMBI.R-R	1	
			SWITCHES		
SW7501-11		EVQ11409K	SWITCH	11	
SW7701-06		EVQ11409K	SWITCH	6	
SW7707		ESD172352	SWITCH	1	
SW7708		ESD172252	SWITCH	1	
			TRANSFORMERS		
T1701		ETE13K80AY	TRANSFORMER	1	
			VARIABLE RESISTORS		
VR4004		EVNCBAA00B53	V.RESISTOR	1	
VR7701		EVUJF1F01C24	V.RESISTOR	1	
VR7702,03		EVUJF0F0153S	V.RESISTOR	2	
			CRYSTAL OSCILLATORS		
X7501		VSX0484	CRYSTAL OSCILLATOR	1	
X7502		VSX0094	CRYSTAL OSCILLATOR	1	
			MISCELLANEOUS		
		VGU6148	VR KNOB	3	
		VJF1043	FIP HOLDER	1	
		VJF1045	VR HOLDER	1	
	■	VEP06852C	OPERATION C.B.A.		(RTL)NV-HD100AM
			DIODES		

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
D6501,02		LN81RCPHLULS	DIODE	2	
D6506,07		1SS254	DIODE	2	
D6509,10		1SS254	DIODE	2	
			CONNECTORS		
P6501		VJP1252T	CONNECTOR (MALE) 12P	1	
PS6501		VJS3405A013A	CONNECTOR (FEMALE)	1	
			RESISTORS		
R6511		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
			SWITCHES		
SW6501-04		EVQ11409K	SWITCH	4	
SW6506		ESD170206	SWITCH	1	
SW6508		ESD170306	SWITCH	1	
SW6509		ESD170206	SWITCH	1	
			MISCELLANEOUS		
		VGU5531	SWITCH KNOB	3	
		VMD0504	LED HOLDER	2	
	■	VEP06852B	OPERATION C.B.A.		(RTL)
			DIODES		
D6501-03		LN81RCPHLULS	DIODE	3	
D6506,07		1SS254	DIODE	2	
D6509,10		1SS254	DIODE	2	
			CONNECTORS		
P6501		VJP1252T	CONNECTOR (MALE) 12P	1	
PS6501		VJS3405A013A	CONNECTOR (FEMALE)	1	
			RESISTORS		
R6511		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
			SWITCHES		
SW6501-04		EVQ11409K	SWITCH	4	
SW6506,07		ESD170206	SWITCH	2	
SW6508		ESD170306	SWITCH	1	
SW6509		ESD170206	SWITCH	1	
			MISCELLANEOUS		
		VGU5531	SWITCH KONB	4	
		VMD0504	LED HOLDER	3	
	■	VEP04395A	KARAOKE C.B.A.		(RTL)

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
			CAPACITORS		
C4301		ECUM1H681JCV	C.CAPACITOR CH 50V 680P	1	
C4302		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C4304-07		ECQV1H104J2	P.CAPACITOR 50V 0.1U	4	
C4308		ECUM1H681JCV	C.CAPACITOR CH 50V 680P	1	
C4310		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C4311,12		ECUM1C105ZFN	C.CAPACITOR 16V 1U	2	
C4313		ECEA0JPK221	E.CAPACITOR 6.3V 220U	1	
C4314		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C4315		VCEA1CAC220	E.CAPACITOR 16V 22U	1	
C4316		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C4317		VCEA0JAC221	E.CAPACITOR 6.3V 220U	1	
C4318		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C4319		ECQB1H153JH	P.CAPACITOR 50V 0.015U	1	
C4320		ECUX1H562KBV	C.CAPACITOR 50V 5600P	1	
C4321		ECUM1C105ZFN	C.CAPACITOR 16V 1U	1	
C4322		ECUM1C334ZFM	C.CAPACITOR 16V 0.33U	1	
C4323		ECUM1C474ZFM	C.CAPACITOR CH 16V 0.47U	1	
C4324		ECUM1C105ZFN	C.CAPACITOR 16V 1U	1	
C4325		ECQB1H153JH	P.CAPACITOR 50V 0.015U	1	
C4326		ECUX1H562KBV	C.CAPACITOR 50V 5600P	1	
C4327,28		ECUM1C105ZFN	C.CAPACITOR 16V 1U	2	
C4329		ECQB1H153JH	P.CAPACITOR 50V 0.015U	1	
C4330		ECUX1H562KBV	C.CAPACITOR 50V 5600P	1	
C4331,32		ECUM1C105ZFN	C.CAPACITOR 16V 1U	2	
C4333		ECEA1CPK470	E.CAPACITOR 16V 47U	1	
C4334		ECEA1CPK101	E.CAPACITOR 16V 100U	1	
C4335		ECUM1C105ZFN	C.CAPACITOR 16V 1U	1	
C4336		VCEA1AAC221	E.CAPACITOR 10V 220U	1	
C4337		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C4338		VCEA1CAC101	E.CAPACITOR 16V 100U	1	
C4339		VCEA0JAC221	E.CAPACITOR 6.3V 220U	1	
C4340,41		ECUM1C105ZFN	C.CAPACITOR 16V 1U	2	
C4343		ECEA1CPK100	E.CAPACITOR 16V 10U	1	
C4344		ECEA1CPB100	E.CAPACITOR 16V 10U	1	
C4345,46		ECUM1C105ZFN	C.CAPACITOR 16V 1U	2	
C4347		ECEA1CPB100	E.CAPACITOR 16V 10U	1	
C4348		ECUM1C105ZFN	C.CAPACITOR 16V 1U	1	
C4349		ECQV1H104JZ	P.CAPACITOR 50V 0.1U	1	
C4350		ECEA1CBZ100	E.CAPACITOR 16V 10U	1	
C4351		ECUM1C105ZFN	C.CAPACITOR 16V 1U	1	
C4352		ECEA1CPK100	E.CAPACITOR 16V 10U	1	
C4353		ECUM1C105ZFN	C.CAPACITOR 16V 1U	1	
C4354		ECUM1C154ZFN	C.CAPACITOR CH 16V 0.15U	1	
C4355		ECUX1H102KBV	C.CAPACITOR 50V 1000P	1	
C4356		VCEA1HAC2R2	E.CAPACITOR 50V 2.2U	1	
C4357		ECEA1HPZ4R7	E.CAPACITOR 50V 4.7U	1	
C4358		ECEA1CPB100	E.CAPACITOR 16V 10U	1	
C4359		ECEA1HPZ4R7	E.CAPACITOR 50V 4.7U	1	
C4361		VCEA1CAH100	E.CAPACITOR 16V 10U	1	
C4362,63		ECEA1EPB4R7	E.CAPACITOR 25V 4.7U	2	
C4364		ECUM1C105ZFN	C.CAPACITOR 16V 1U	1	
C4365		ECEA1CPK100	E.CAPACITOR 16V 10U	1	
C4366		VCEA1CAC330	E.CAPACITOR 16V 33U	1	
C4367		ECEA0JPK101	E.CAPACITOR 6.3V 100U	1	
C4368		ECUM1C105ZFN	C.CAPACITOR 16V 1U	1	
C4369,70		ECEA1EPB4R7	E.CAPACITOR 25V 4.7U	2	
C4372		ECUM1C105ZFN	C.CAPACITOR 16V 1U	1	
C4373		ECUX1H102JV	C.CAPACITOR CH 50V 1000P	1	
C4374		ECUX1H392KBV	C.CAPACITOR 50V 3900P	1	
C4375-77		ECQV1H683JZ	P.CAPACITOR 50V 0.068U	3	
C4378		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C4379		ECEA0JPK221	E.CAPACITOR 6.3V 220U	1	
C4380		ECQB1H153JH	P.CAPACITOR 50V 0.015U	1	
C4381		ECUX1H821JCV	C.CAPACITOR 50V 820P	1	
C4382		ECUX1H152KBV	C.CAPACITOR CH 50V 1500P	1	
C4383,84		ECUM1E122JV	C.CAPACITOR CH 25V 1200P	2	
C4385		ECUM1E152JV	C.CAPACITOR CH 25V 1500P	1	
C4386		ECUX1H182KBV	C.CAPACITOR CH 50V 1800P	1	
C4387		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C4388-90		ECQV1H683JZ	P.CAPACITOR 50V 0.068U	3	
C4391,92		ECUX1H150JCV	C.CAPACITOR 50V 15P	2	
C4393		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C4394		ECUX1H331JCV	C.CAPACITOR 50V 330P	1	
C4395		VCEA0JAC221	E.CAPACITOR 6.3V 220U	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C4396		ECUM1C105ZFN	C.CAPACITOR 16V 1U	1	
C4397		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C4399		VCEA1AAC470	E.CAPACITOR 10V 47U	1	
C4401		ECUM1C105ZFN	C.CAPACITOR 16V 1U	1	
C4403		ECUM1C105ZFN	C.CAPACITOR 16V 1U	1	
C4405		ECUM1C105ZFN	C.CAPACITOR 16V 1U	1	
C4408,09		ECUM1C105ZFN	C.CAPACITOR 16V 1U	2	
C4410		ECEA1CPK100	E.CAPACITOR 16V 10U	1	
C4411		ECUM1C105ZFN	C.CAPACITOR 16V 1U	1	
C4412		ECEA1EPB4R7	E.CAPACITOR 25V 4.7U	1	
C4413		ECEA1CPK100	E.CAPACITOR 16V 10U	1	
C4414		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C4415		ECEA1CPB100	E.CAPACITOR 16V 10U	1	
C4416		ECEA1EPB4R7	E.CAPACITOR 25V 4.7U	1	
C4417		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C4419-21		VCEA1CAC100	E.CAPACITOR 16V 10U	3	
C4423,24		ECUM1C105ZFN	C.CAPACITOR 16V 1U	2	
C4425		ECUX1H272KBV	C.CAPACITOR 50V 2700P	1	
C4426		ECQB1H123JH	P.CAPACITOR 50V 0.012U	1	
C4427		VCEA1CAC100	E.CAPACITOR 16V 10U	1	
C4428		ECUM1C105ZFN	C.CAPACITOR 16V 1U	1	
C4429		ECUM1H681JCV	C.CAPACITOR CH 50V 680P	1	
C4430		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C4431		ECUX1E223ZFV	C.CAPACITOR CH 25V 0.022U	1	
C4432		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C4434		ECUM1C105ZFN	C.CAPACITOR 16V 1U	1	
C4435,36		ECUX1H471JCV	C.CAPACITOR 50V 470P	2	
C4437		ECEA1CPK100	E.CAPACITOR 16V 10U	1	
C4438		ECUX1H030DCV	C.CAPACITOR 50V 3P	1	
C4439		ECQB1H123JH	P.CAPACITOR 50V 0.012U	1	
C4440		ECUX1H332KBV	C.CAPACITOR 50V 3300P	1	
C4441		ECUM1C334ZFM	C.CAPACITOR 16V 0.33U	1	
C4442,43		ECUM1C105ZFN	C.CAPACITOR 16V 1U	2	
C4444		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C4445		ECUX1H102JV	C.CAPACITOR CH 50V 1000P	1	
C4446		ECUX1H182KBV	C.CAPACITOR CH 50V 1800P	1	
C4447,48		ECUX1H101JCV	C.CAPACITOR CH 50V 100P	2	
C4449		ECUX1H221JCV	C.CAPACITOR CH 50V 220P	1	
C4450		ECUX1H390JCV	C.CAPACITOR CH 50V 39P	1	
			DIODES		
D4302		MA723VT	DIODE	1	(VT)
D4303		MA141WA	DIODE	1	
D4305		MA141WK	DIODE	1	
D4307		MA723VT	DIODE	1	(VT)
D4309,10		MA141WK	DIODE	2	
D4311,12		MA141K	DIODE	2	
D4313		MA4100L	DIODE	1	
D4314		MA141K	DIODE	1	
D4315		MA141WA	DIODE	1	
			INTEGRATED CIRCUITS		
IC4301		M65832SP	IC	1	
IC4302		M50196P	IC	1	
IC4303		NJM2072M	IC	1	
IC4304		NJM4565MD	IC	1	
IC4305		CXA1642M	IC	1	
IC4306-09		NJM4565MD	IC	4	
IC4310		M69030P	IC	1	
IC4311-13		M52055FP	IC	3	
IC4314		NJM4558M	IC	1	
IC4317,18		UPC78L05J	IC	2	
IC4319		M5233FP	IC	1	
IC4320		UPD4066BG	IC	1	
			COILS		
L4301		ELESQ101KA	COIL 100UH	1	
L4303		ELESQ101KA	COIL 100UH	1	
L4304,05		VLQ0555	COIL	2	
			CONNECTORS		

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
P4301		VJP3080	CONNECTOR (MALE) 12P	1	
P4302		VJP1146	CONNECTOR (MALE) 10P	1	
P4302		VJS1146	CONNECTOR (FEMALE) 10P	1	
P4305		VJP1932T	CONNECTOR (MALE) 15P	1	
P7703		VJS1237	CONNECTOR (FEMALE) 10P	1	
			TRANSISTORS		
Q4301		2SD1992	TRANSISTOR	1	
Q4308		2SD1819	TRANSISTOR	1	
			COMBINATION PARTS		
QR4302		UN5212	TRANSISTOR-RESISTOR	1	
QR4304		UN5211	TRANSISTOR-RESISTOR	1	
QR4305		XN6213	TRANSISTOR-RESISTOR	1	
QR4306		UN5211	TRANSISTOR-RESISTOR	1	
QR4309		XN6212	TRANSISTOR-RESISTOR	1	
QR4310		UN5212	TRANSISTOR-RESISTOR	1	
QR4312		XN6212	TRANSISTOR-RESISTOR	1	
QR4313		UN5113	TRANSISTOR-RESISTOR	1	
QR4315		UN5212	TRANSISTOR-RESISTOR	1	
QR4316		UN5113	TRANSISTOR-RESISTOR	1	
QR4318,19		UN5113	TRANSISTOR-RESISTOR	2	
QR4320		UN5211	TRANSISTOR-RESISTOR	1	
QR4321,22		DTC363EK	COMBI.TR-R	2	
			RESISTORS		
R4301		ERJ3GEYJ183	M.RESISTOR CH 1/16W 18K	1	
R4302		ERJ3GEYJ153	M.RESISTOR CH 1/16W 15K	1	
R4304		ERJ3GEYJ302	M.RESISTOR CH 1/16W 3K	1	
R4305		ERJ3GEYJ153	M.RESISTOR CH 1/16W 15K	1	
R4306		ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R4307		ERJ3GEYJ153	M.RESISTOR CH 1/16W 15K	1	
R4308,09		VRE0071E200	M.RESISTOR 1/10W	2	
R4310		ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R4311		ERJ3GEYJ153	M.RESISTOR CH 1/16W 15K	1	
R4312		ERJ3GEYJ514	M.RESISTOR CH 1/16W 510K	1	
R4313		ERJ3GEYG243	M.RESISTOR 1/16W 24K	1	
R4314		ERJ3GEYJ153	M.RESISTOR CH 1/16W 15K	1	
R4315		ERJ3GEYG333	M.RESISTOR CH 1/16W 33K	1	
R4316		ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	1	
R4318		ERJ3GEYJ105	M.RESISTOR CH 1/16W 1M	1	
R4319		ERJ3GEYJ563	M.RESISTOR CH 1/16W 56K	1	
R4320,21		ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	2	
R4322		ERJ3GEYJ563	M.RESISTOR CH 1/16W 56K	1	
R4323,24		ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	2	
R4325		ERJ3GEYJ563	M.RESISTOR CH 1/16W 56K	1	
R4326,27		ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	2	
R4328		ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R4329		ERJ3GEYJ152	M.RESISTOR 1/16W 1.5K	1	
R4330		ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R4331,32		ERJ3GEYJ392	M.RESISTOR CH 1/16W 3.9K	2	
R4333		ERJ3GEYJ182	M.RESISTOR CH 1/16W 1.8K	1	
R4334		ERJ3GEYJ752	M.RESISTOR CH 1/16W 7.5K	1	
R4335		ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R4338		ERJ3GEYJ102	M.RESISTOR 1/16W 1K	1	
R4341		ERJ3GEYJ752	M.RESISTOR CH 1/16W 7.5K	1	
R4344,45		ERJ3GEYJ333	M.RESISTOR CH 1/16W 33K	2	
R4346		ERJ3GEYJ102	M.RESISTOR 1/16W 1K	1	
R4348		ERJ3GEYJ102	M.RESISTOR 1/16W 1K	1	
R4349		ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R4351		ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
R4352		ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R4353		ERJ3GEYJ272	M.RESISTOR CH 1/16W 2.7K	1	
R4354		ERJ3GEYJ203	M.RESISTOR CH 1/16W 20K	1	
R4355,56		ERJ3GEYJ393	M.RESISTOR CH 1/16W 39K	2	
R4357		ERJ3GEYJ123	M.RESISTOR CH 1/16W 12K	1	
R4358		ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	1	
R4360,61		ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	2	
R4362		ERJ3GEYJ102	M.RESISTOR 1/16W 1K	1	
R4363-66		ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	4	
R4367,68		ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	2	
R4369		ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R4370		ERJ3GEYJ153	M.RESISTOR CH 1/16W 15K	1	
R4371		ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	1	
R4373		ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R4374		ERJ3GEYJ183	M.RESISTOR CH 1/16W 18K	1	
R4375		ERJ3GEYJ102	M.RESISTOR 1/16W 1K	1	
R4376		ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	1	
R4377-79		ERJ3GEYK335	M.RESISTOR CH 1/16W 3.3M	3	
R4380		ERJ3GEYJ105	M.RESISTOR CH 1/16W 1M	1	
R4381		ERJ3GEYJ124	M.RESISTOR CH 1/16W 120K	1	
R4382		ERJ3GEYJ184	M.RESISTOR CH 1/16W 180K	1	
R4384,85		ERJ3GEYJ152	M.RESISTOR 1/16W 1.5K	2	
R4386-88		ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	3	
R4390,91		ERJ3GEYJ102	M.RESISTOR 1/16W 1K	2	
R4392		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R4393		ERJ3GEYJ102	M.RESISTOR 1/16W 1K	1	
R4400		ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	1	
R4401		ERJ3GEYJ333	M.RESISTOR CH 1/16W 33K	1	
R4402		ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R4412		ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R4415		ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R4416		ERJ3GEYG912	M.RESISTOR CH 1/16W 9.1K	1	
R4417		ERJ3GEYG243	M.RESISTOR 1/16W 24K	1	
R4419		ERJ3GEYJ332	M.RESISTOR 1/16W 3.3K	1	
R4420		ERJ3GEYJ102	M.RESISTOR 1/16W 1K	1	
R4421		ERJ3GEYJ471	M.RESISTOR CH 1/16W 470	1	
R4422		ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R4423		ERJ3GEYJ683	M.RESISTOR CH 1/16W 68K	1	
R4425		ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R4427		ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	1	
R4428		ERJ3GEYJ102	M.RESISTOR 1/16W 1K	1	
R4432		ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R4433		ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
R4435,36		ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	2	
R4439-41		ERJ3GEYJ682	M.RESISTOR CH 1/16W 6.8K	3	
R4442		ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R4444		ERJ3GEYJ102	M.RESISTOR 1/16W 1K	1	
R4445		ERJ3GEYG563	M.RESISTOR CH 1/16W 56K	1	
R4448		ERJ3GEYJ332	M.RESISTOR 1/16W 3.3K	1	
R4449		ERJ3GEYJ683	M.RESISTOR CH 1/16W 68K	1	
R4450,51		ERJ3GEYJ682	M.RESISTOR CH 1/16W 6.8K	2	
R4453,54		ERJ3GEYJ682	M.RESISTOR CH 1/16W 6.8K	2	
R4455		ERJ3GEYJ123	M.RESISTOR CH 1/16W 12K	1	
R4456		ERJ3GEYJ683	M.RESISTOR CH 1/16W 68K	1	
R4457		ERJ3GEYJ332	M.RESISTOR 1/16W 3.3K	1	
R4458		ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R4459		ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R4460		ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R4461		ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	1	
R4462,63		ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	2	
R4464		ERJ3GEYJ102	M.RESISTOR 1/16W 1K	1	
			CRYSTAL OSCILLATORS		
X4301		VSX0339	CRYSTAL OSCILLATOR	1	
X4302		VSX0380	CRYSTAL OSCILLATOR	1	
			MISCELLANEOUS		
		VSC3810	SHIELD COVER (MAIN)	1	
		VSC3811	SHIELD COVER (BOTTOM)	2	
		VEE8281	CABLE	1	(P4302-P7703)
		VJF1001	WIRE SADDLE	1	
	■	VEPOOS83A	MIC AMP C.B.A.		(RTL)
			CAPACITORS		
C4802		ECUX1H151JCV	C.CAPACITOR CH 50V 150P	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C4803		ECEA1CPK470	E.CAPACITOR 16V 47U	1	
C4804		ECST1CY3352	T.CAPACITOR 16V 3.3U	1	
C4805		VCEA1CAC470	E.CAPACITOR 16V 47U	1	
C4806		VCEA1CAC330	E.CAPACITOR 16V 33U	1	
C4807		ECST1CY3352	T.CAPACITOR 16V 3.3U	1	
C4808		ECEA1CPK470	E.CAPACITOR 16V 47U	1	
C4809		ECUM1H151JCN	C.CAPACITOR CH 50V 150P	1	
C4810		ECUM1H1042FN	C.CAPACITOR CH 50V 0.1U	1	
C4811,12		ECEA1EPK4R7	E.CAPACITOR 25V 4.7U	2	
C4813		ECEA1HK010	E.CAPACITOR 50V 1U	1	
C4814		ECUM1C4742FN	C.CAPACITOR 16V 0.47U	1	
			DIODES		
D4801		MA153	DIODE	1	
D4802		1SS254	DIODE	1	
			INTEGRATED CIRCUITS		
IC4801		BA7760F	IC	1	
			JACKS		
J4801,02		VJJ0362	JACK	2	
			CONNECTORS		
P4801		VJS2571A008	CONNECTOR (FEMALE)	1	
			TRANSISTORS		
Q4801,02		MSD1328	TRANSISTOR	2	
			RESISTORS		
R4802		ERJ6GEYJ153	M.RESISTOR CH 1/10W 15K	1	
R4803		ERJ3GEYJ151	M.RESISTOR CH 1/16W 150	1	
R4804		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R4805		ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	1	
R4806		ERJ6GEYJ151	M.RESISTOR CH 1/10W 150	1	
R4807		ERJ6GEYJ153	M.RESISTOR CH 1/10W 15K	1	
R4808,09		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	2	
R4810		ERJ3GEYJ332	M.RESISTOR 1/16W 3.3K	1	
R4811		ERJ3GEYJ153	M.RESISTOR CH 1/16W 15K	1	
R4812-14		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	3	
			MISCELLANEOUS		
		VMP3943	ANGLE	1	
		VEE8413	CABLE	1	(P4801-P7704)
	■	---------	MECHANISM CONNECTION C.B.A.		(RTL)
			DIODES		
D1501		LN59L.VT	DIODE	1	
			INTEGRATED CIRCUITS		
IC1501,02		ON1387	IC	2	
			CONNECTORS		
P1503		VJS3316A002	CONNECTOR (FEMALE)	1	
P1504		VJS3317A004	CONNECTOR (FEMALE)	1	
P1505		VJS3193B013A	CONNECTOR (FEMALE)	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
			TRANSISTORS		
Q1501,02		PN2051-NC.VT	TRANSISTOR	2	
			SWITCHES		
SW1501		VES0695	SAFETY SWITCH	1	
			MISCELLANEOUS		
		VMD2029	REEL GUIDE	1	
	■	VEP00T02A	FE HEAD C.B.A.		(RTL)
			CAPACITORS		
C1401		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C1402		ECQB1H472JH	P.CAPACITOR 50V 4700P	1	
C1403		ECQB1H333KH	P.CAPACITOR 50V 0.033U	1	
C1404		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
			COILS		
L1401		ELESQ101KA	COIL 100UH	1	
			CONNECTORS		
P1509		VJP1148	CONNECTOR (MALE) 2P	1	
P1512		VJS3070T	CONNECTOR (FEMALE)	1	
			TRANSISTORS		
Q1401		2SC3311	TRANSISTOR	1	
			RESISTORS		
R1401		ERDS2TJ333	C.RESISTOR 1/4W 33K	1	
			TRANSFORMERS		
T1401		EIQ7QF012Q	I.F. TRANSFORMER	1	
	■	---------	MOTOR C.B.A.		(RTL)
			MISCELLANEOUS		
		VJP3316B002	CONNECTOR (MALE)	1	
	■	VEP00S86A	POWER TRANSISTOR C.B.A.		(RTL)
			CONNECTORS		
P1506		VJP1230T	CONNECTOR(MALE) 3P	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
			TRANSISTORS		
Q1503		2SB941QBB	TRANSISTOR	1	

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V 11728

Order No. VRD9504S111

Service Manual

Video Product

Model No. Mentioned below

Supplement

Effective from: Running Change

Subject: Improvement of the performance for HI-FI Audio

Please use this manual together with the Service Manual for Order No. Mentioned below
Model No. Mentioned below

1. Model No. & Order No.

(1) GROUP A

NV-FS200B/EC/FS88B/EC	VRD9204M120	NV-FS200EG/FS88EG	VRD9202M107
FS88EE	9207M140	F55A	9112M159
F55AM	9112M166	F55B/EB/EC	9110M158
F55EA/EE	9112M159	F55EG/EV	9109M155
F55F	9202M109	F55MC/F95BN	9112M166
F55PX/TN	9202M104	F77B/EC	9203M118
F77EG	9202M108	F96BD	9207M142

(2) GROUP B

NV-F115BD	VRD9305M122	NV-F123BD	VRD9406M124
F125BD/HD100AM	9212M158	HD100A/EA	9301M104
HD100B/EB	9304M117	HD100BR	9305M128
HD100EG/EO	9303M110	HD100GA/GEA	9406M124
HD100JT	9306M129	HD100MC	9212M159C
HD101EB/EO	9402M104	HD101EG	9311M143
HD110AM	9305M122	HD80MC	9301M107

(3) GROUP C

NV-F120BD	VRD9406M125	NV-HD100EC/EE	VRD9306M130
HD100F	9309M137	HD101EC	9402M104
HD101F	9410M147	HD70A/EA	9405M117
HD70AM/HD77AM	9407M126	HD700B/EC	9401M101
HD700EG	9310M136	HD700F	9408M135
HD78AM	9502M106	HD82MC	9309M138C
HD90B	9404M109	HD90BI	9407M127
HD90EB/EC/EO	9404M110	HD90EE	9407M126
HD90EG	9403M108	HD95MC	9406M118C
HP10MU	9409M148	HP10RAM	9411M155
HS1000B/EC	9408M134	HS1000EG	9406M119
HS1000EGG	9409M149	HS800EG	9409M137

(4) GROUP D

NV-HD100PX	VRD9305M128

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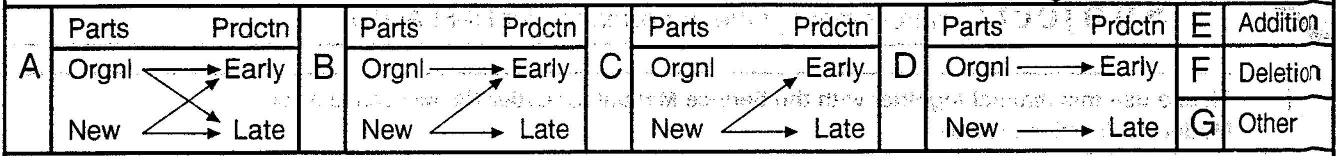
Printed in Japan

⚠ WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

2. The following parts have been changed.

INTERCHANGEABILITY CODE See the I/C column on the following Part Number list


A
Parts
Prdctn
Orgnl
Early
New
Late
B
Parts
Prdctn
Orgnl
Early
New
Late
C
Parts
Prdctn
Orgnl
Early
New
Late
D
Parts
Prdctn
Orgnl
Early
New
Late
E
Addition
F
Deletion
G
Other

Parts Number List

Ref No.	Original Part No.	New Part No.	Pcs	Part Name	I/C	Remarks
IC4501	BH7770KS	XLH7773AKS	1	IC	B	GROUP A
IC4501	XLH7770KS	XLH7773AKS	1	IC	B	GROUP B
IC4501	XLH7773KS	XLH7773AKS	1	IC	B	GROUP C
IC4501	XLH7770KS1	XLH7773AKS	1	IC	B	GROUP D

V11 728

Order No. VRD9404S004

Service Manual

Video Product

Model No. Mentioned Below

Supplement

Effective from: E3..........

Subject: Hi-Fi Audio Pack C.B.A. Change

Please use this manual together with the Service Manual for Order No. Mentioned Below, Model No. Mentioned Below.

1. Model No. (Service Manual Order No.)

NV-F125BD, HD100AM (VRD9212M158)
NV-HD100MC (VRD9212M159C)
NV-HD80MC (VRD9301M107)
NV-HD80MC (VRD9301M103C)
NV-HD100A/EA (VRD9301M104)
NV-HD100B/EB (VRD9304M117)
NV-HD100EG/EO (VRD9303M110)
NV-F55PX/TN (VRD9202M104)
NV-F55A/EA/EE (VRD9112M159)
NV-F55B/EB/EC (VRD9110M158)
NV-F55EG/EV (VRD9109M155)
NV-F55F (VRD9202M109)
NV-F77EG (VRD9202M108)
NV-F77B/EC (VRD9203M118)
NV-F55AM/MC, F95BN (VRD9112M166)
NV-F96BD (VRD9207M142)

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Printed in Japan

2. Parts List

The Hi-Fi Audio Pack C.B.A.s have been changed to rationalize.

INTERCHANGEABLITY CODE See the I/C column on the following Part Number list

A	Parts	Prdctn	B	Parts	Prdctn	C	Parts	Prdctn	D	Parts	Prdctn	E	Addition
	Orgnl	Early		Orgnl	Early		Orgnl	Early		Orgnl	Early	F	Deletion
	New	Late		New	Late		New	Late		New	Late	G	Other

Parts Number List

Ref. No.	Original Part NO.	New Part No.	Part Name & Description	I/C	Remarks
	VEP04361K	VEP04410K	Hi-Fi AUDIO PACK C.B.A.	A	(RTL) NV-F125BD NV-HD100AM/MC NV-HD80MC
	VEP04361L	VEP04410L	Hi-Fi AUDIO PACK C.B.A.	A	(RTL) NV-HD100A/EA
	VEP04361R	VEP04410R	Hi-Fi AUDIO PACK C.B.A.	A	(RTL) NV-HD100B/EB NV-HD100EO
	VEP04361T	VEP04410R	Hi-Fi AUDIO PACK C.B.A.	A	(RTL) NV-HD100EG
	VEP04361B	VEP04410B	Hi-Fi AUDIO PACK C.B.A.	A	(RTL) NV-F55A/EA/F NV-F55B/EB/EC NV-F55EG/EE/EV NV-F77EG/B/EC
	VEP04361F	VEP04410F	Hi-Fi AUDIO PACK C.B.A.	A	(RTL) NV-F55AM/MC NV-F95BN, F96BD
	VEP04361G	VEP04410G	Hi-Fi AUDIO PACK C.B.A.	A	(RTL) NV-F55PX
	VEP04361J	VEP04410J	Hi-Fi AUDIO PACK C.B.A.	A	(RTL) NV-F55TN

NOTE: **The new C.B.A.s (EX. VEP04410K) is interchangeable with the original C.B.A.s (EX. VEP04361K).**
But the C.B.A. structure is different as attached in the following section.

Note:1.Be sure to make your orders of replacement parts according to this list.

2.IMPORTANT SAFETY NOTICE : Components identified with the mark <!> have the special characteristics for safety. When replacing any of these components,use only the same type.

3.Unless otherwise specified,
All resistors are in OHMS , K=1,000 OHMS. All capacitors are in MICRO-FARADS(uf),P=uuF.

4.The P.C.Board units marked width'■'show below the main assembled parts.

5.The marking(RTL) indicates the retention time is limited for this item. After the discontinuation of this assembly in production, it will no longer be available.

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
		VEP04410K	Hi-Fi AUDIO PACK C.B.A.	1	(RTL)
					NV-F125BD
					NV-HD100AM/MC
					NV-HD80MC
		VEP04410L	Hi-Fi AUDIO PACK C.B.A.	1	(RTL)
					NV-HD100A/EA
		VEP04410R	Hi-Fi AUDIO PACK C.B.A.	1	(RTL)
					NV-HD100B/EB
					NV-HD100EO
					NV-HD100EG
		VEP04410B	Hi-Fi AUDIO PACK C.B.A.	1	(RTL)
					NV-F55A/EA/F
					NV-F55B/EB/EC
					NV-F55EG/EE/EV
					NV-F77EG/B/EC
		VEP04410F	Hi-Fi AUDIO PACK C.B.A.	1	(RTL)
					NV-F55AM/MC
					NV-F95BN
					NV-F96BD
		VEP04410G	Hi-Fi AUDIO PACK C.B.A.	1	(RTL)
					NV-F55PX
		VEP04410J	Hi-Fi AUDIO PACK C.B.A.	1	(RTL)
					NV-F55TN
	■	VEP04410K	Hi-Fi AUDIO PACK C.B.A.		(RTL)
					NV-F125BD
					NV-HD100AM/MC
					NV-HD80MC
C4503		ECUX1H152KBV	C.CAPACITOR CH 50V 1500P	1	
C4504,05		ECEA1CU470	E.CAPACITOR 16V 47U	2	
C4506		ECEA1CU100	E.CAPACITOR 16V 10U	1	
C4507		ECQB1H223JA	P.CAPACITOR 50V 0.022U	1	
C4508		ECEA1EBZ4R7	E.CAPACITOR 25V 4.7U	1	
C4509		ECEA1AU470	E.CAPACITOR 10V 47U	1	
C4510		ECQB1H103JA	P.CAPACITOR 50V 0.01U	1	
C4511		ECQB1H332JA	P.CAPACITOR 50V 3300P	1	
C4512		ECUX1H561JV	C.CAPACITOR CH 50V 560P	1	
C4513		ECUM1H681JN	C.CAPACITOR CH 50V 680P	1	
C4514		ECUM1H561JN	C.CAPACITOR CH 50V 560P	1	
C4515		ECEA1EU4R7	E.CAPACITOR 25V 4.7U	1	
C4517		ECEA1AU101	E.CAPACITOR 10V 100U	1	
C4518		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C4521		ECUM1C473KBV	C.CAPACITOR CH 16V 0.047U	1	
C4524		ECEA1AU101	E.CAPACITOR 10V 100U	1	
C4528		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C4530		ECEA0JPK221	E.CAPACITOR 6.3V 220U	1	
C4533		ECEA1CU330	E.CAPACITOR 16V 33U	1	
C4537		ECUM1H102JCN	C.CAPACITOR CH 50V 1000P	1	
C4538		ECEA1HUR47	E.CAPACITOR 50V 0.47U	1	
C4539		ECUM1C224ZFN	C.CAPACITOR CH 16V 0.22U	1	
C4541		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C4545		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C4556		ECEA1CU100	E.CAPACITOR 16V 10U	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C4557		ECQB1H223JA	P.CAPACITOR 50V 0.022U	1	
C4558		ECEA1EBZ4R7	E.CAPACITOR 25V 4.7U	1	
C4559		ECEA1AU470	E.CAPACITOR 10V 47U	1	
C4560		ECQB1H103JA	P.CAPACITOR 50V 0.01U	1	
C4561		ECQB1H332JA	P.CAPACITOR 50V 3300P	1	
C4562		ECUM1H561JN	C.CAPACITOR CH 50V 560P	1	
C4563		ECUM1H681JN	C.CAPACITOR CH 50V 680P	1	
C4564		ECUM1H561JN	C.CAPACITOR CH 50V 560P	1	
C4565		ECEA1EU4R7	E.CAPACITOR 25V 4.7U	1	
C4567		ECEA1AU101	E.CAPACITOR 10V 100U	1	
C4568		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C4576		ECUM1E473KBN	C.CAPACITOR CH 25V 0.047U	1	
C4583		ECEA1CU330	E.CAPACITOR 16V 33U	1	
C4585,86		ECEA1AU101	E.CAPACITOR 10V 100U	2	
C4591		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C4592		ECUX1H152KBV	C.CAPACITOR CH 50V 1500P	1	
C4606		VCEA0JAC470	E.CAPACITOR 6.3V 47U	1	
C4611		ECQB1H103JH	P.CAPACITOR 50V 0.01U	1	
C4616		ECUX1H101JCV	C.CAPACITOR CH 50V 100P	1	
C4617		ECEA1OM22	E.CAPACITOR 10V 22U	1	
C4618		ECQB1H822JH	P.CAPACITOR 50V 8200P	1	
C4619		ECEA1APB100	E.CAPACITOR 10V 10U	1	
C4621		ECEA0JPK221	E.CAPACITOR 6.3V 220U	1	
C4629		ECQB1H103JZ	P.CAPACITOR 50V 0.01U	1	
C4636		ECUM1H471JN	C.CAPACITOR CH 50V 470P	1	
C4638		ECQB1H822JH	P.CAPACITOR 50V 8200P	1	
C4652,53		ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	2	
D4501,02		MA151H	DIODE	2	
D4503		MA151K	DIODE	1	
D4504		MA151H	DIODE	1	
D4602		MA151K	DIODE	1	
IC4501		XLH7773KS	IC	1	
IC4601		BA7755AF	IC	1	
L4501,02		ELESQ101KA	COIL 100UH	2	
L4601		VLQEL07F153J	COIL 15MH	1	
PS4001-03		VJS3186B018	CONNECTOR (FEMALE) 18P	3	
Q4501		2SD655	TRANSISTOR	1	
Q4551		2SB561	TRANSISTOR	1	
Q4601		MSD1328	TRANSISTOR	1	
QR4508,09		MRN2404	TRANSISTOR-RESISTOR	2	
QR4510		MRN1403	TRANSISTOR-RESISTOR	1	
QR4602		MRN2402	TRANSISTOR-RESISTOR	1	
QR4603		MRN1404	TRANSISTOR-RESISTOR	1	
R4501,02		ERJ3GEYG363	M.RESISTOR CH 1/16W 36K	2	
R4503		VRE0071E36C	RESISTOR	1	
R4504,05		ERJ6GEYJ393	M.RESISTOR CH 1/10W 39K	2	
R4506,07		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	2	
R4508		ERJ6GEYG224	M.RESISTOR CH 1/10W 220K	1	
R4509		ERJ6GEYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R4511		ERJ6GEYG303	M.RESISTOR CH 1/10W 30K	1	
R4512		VRE0034E163	M.RESISTOR CH 1/10W 16K	1	
R4513		ERJ3GEYG103	M.RESISTOR CH 1/16W 10K	1	
R4514		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R4518,19		ERJ6GMZ0R00	M.RESISTOR 1/10W 0	2	
R4522		ERJ6GEYJ225	M.RESISTOR CH 1/10W 2.2M	1	
R4527		VRE0034E333	M.RESISTOR CH 1/10W 33K	1	
R4528		VRE0034E153	M.RESISTOR CH 1/10W 15K	1	
R4529		ERJ6GEYG562	M.RESISTOR CH 1/10W 5.6K	1	
R4530		ERJ3GEYJ334	M.RESISTOR CH 1/16W 330K	1	
R4534		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R4535		ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R4539		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R4540		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R4541		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R4542		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R4543		ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	1	
R4551,52		ERJ3GEYJ393	M.RESISTOR CH 1/16W 39K	2	
R4553		ERJ6GEYJ273	M.RESISTOR CH 1/10W 27K	1	
R4554		ERJ3GEYJ273	M.RESISTOR CH 1/16W 27K	1	
R4558		ERJ6GEYG224	M.RESISTOR CH 1/10W 220K	1	
R4561		ERJ6GEYG303	M.RESISTOR CH 1/10W 30K	1	
R4562		VRE0034E10C	RESISTOR	1	
R4563		ERJ3GEYG272	M.RESISTOR CH 1/16W 2.7K	1	
R4568		ERJ6GEYJ273	M.RESISTOR CH 1/10W 27K	1	
R4569		ERJ3GEYJ273	M.RESISTOR CH 1/16W 27K	1	
R4572		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R4573		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R4577		ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R4578		VRE0034E473	M.RESISTOR CH 1/10W 47K	1	
R4581		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R4584		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R4585		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R4586		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R4587,88		ERJ3GEYJ273	M.RESISTOR CH 1/16W 27K	2	
R4591		ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R4592		ERJ6GEYJ563	M.RESISTOR CH 1/10W 56K	1	
R4593		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R4594		ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R4603		ERJ3GEYG183	M.RESISTOR CH 1/16W 18K	1	
R4606		ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R4610		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R4611,12		ERJ6GEYJ331	M.RESISTOR CH 1/10W 330	2	
R4613		ERJ6GEYJ394	M.RESISTOR CH 1/10W 390K	1	
R4615		ERJ6GEYJ133	M.RESISOTR CH 1/10W 13K	1	
R4616		ERJ6GEYJ105	M.RESISTOR CH 1/10W 1M	1	
R4638		ERJ6GMZ0R00	M.RESISTOR 1/10W 0	1	
R4649		ERJ3GEYG470	M.RESISTOR CH 1/16W 47	1	
R4651		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R4653		ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1	
R4654		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R4655		ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R4656		ERJ6GEYG243	M.RESISTOR CH 1/10W 24K	1	
R4657		ERJ6GEYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R4666		ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1	
VR4501		EVMECSA00B53	V.RESISTOR	1	
VR4502		EVMEASA00B24	V.RESISTOR	1	
VR4507		EVMEASA00B24	V.RESISTOR	1	
VR4509		EVMECSA00BY3	V.RESISTOR	1	
VR4550		EVMECSA00BS3	V.RESISTOR	1	
VR4551,52		EVMEASA00B55	V.RESISTOR	2	
	■	VEP04410L	Hi-Fi AUDIO PACK C.B.A.		NV-HD100A/EA
C4503		ECUX1H152KBV	C.CAPACITOR CH 50V 1500P	1	
C4504,05		ECEA1CU470	E.CAPACITOR 16V 47U	2	
C4506		ECEA1CU100	E.CAPACITOR 16V 10U	1	
C4507		ECQB1H223JA	P.CAPACITOR 50V 0.022U	1	
C4508		ECEA1EBZ4R7	E.CAPACITOR 25V 4.7U	1	
C4509		ECEA1AU470	E.CAPACITOR 10V 47U	1	
C4510		ECQB1H103JA	P.CAPACITOR 50V 0.01U	1	
C4511		ECQB1H332JA	P.CAPACITOR 50V 3300P	1	
C4512		ECUX1H561JV	C.CAPACITOR CH 50V 560P	1	
C4513		ECUM1H681JN	C.CAPACITOR CH 50V 680P	1	
C4514		ECUM1H561JN	C.CAPACITOR CH 50V 560P	1	
C4515		ECEA1EU4R7	E.CAPACITOR 25V 4.7U	1	
C4517		ECEA1AU101	E.CAPACITOR 10V 100U	1	
C4518		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C4521		ECUM1C473KBV	C.CAPACITOR CH 16V 0.047U	1	
C4522		VCEA1HAH3R3	E.CAPACITOR 50V 3.3U	1	
C4524		ECEA1AU101	E.CAPACITOR 10V 100U	1	
C4528		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C4530		ECEA0JPK470	E.CAPACITOR 6.3V 47U	1	
C4533		ECEA1CU330	E.CAPACITOR 16V 33U	1	
C4537		ECUM1H102JCN	C.CAPACITOR CH 50V 1000P	1	
C4538		ECEA1HUR47	E.CAPACITOR 50V 0.47U	1	
C4539		ECUM1C224ZFN	C.CAPACITOR CH 16V 0.22U	1	
C4541		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C4545		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C4556		ECEA1CU100	E.CAPACITOR 16V 10U	1	
C4557		ECQB1H223JA	P.CAPACITOR 50V 0.022U	1	
C4558		ECEA1EBZ4R7	E.CAPACITOR 25V 4.7U	1	
C4559		ECEA1AU470	E.CAPACITOR 10V 47U	1	
C4560		ECQB1H103JA	P.CAPACITOR 50V 0.01U	1	
C4561		ECQB1H332JA	P.CAPACITOR 50V 3300P	1	
C4562		ECUM1H561JN	C.CAPACITOR CH 50V 560P	1	
C4563		ECUM1H681JN	C.CAPACITOR CH 50V 680P	1	
C4564		ECUM1H561JN	C.CAPACITOR CH 50V 560P	1	
C4565		ECEA1EU4R7	E.CAPACITOR 25V 4.7U	1	
C4567		ECEA1AU101	E.CAPACITOR 10V 100U	1	
C4568		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C4572		VCEA1HAH3R3	E.CAPACITOR 50V 3.3U	1	
C4576		ECUM1E473KBN	C.CAPACITOR CH 25V 0.047U	1	
C4583		ECEA1CU330	E.CAPACITOR 16V 33U	1	
C4585,86		ECEA1AU101	E.CAPACITOR 10V 100U	2	
C4591		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C4592		ECUX1H152KBV	C.CAPACITOR CH 50V 1500P	1	
C4604		ECUM1H182JN	C.CAPACITOR CH 50V 1800P	1	
C4606		VCEA0JAC470	E.CAPACITOR 6.3V 47U	1	
C4611		ECQB1H103JH	P.CAPACITOR 50V 0.01U	1	
C4613		ECUM1H471JCN	C.CAPACITOR CH 50V 470P	1	
C4616		ECUX1H102ZFV	C.CAPACITOR CH 50V 1000P	1	
C4617		ECEA10M22	E.CAPACITOR 10V 22U	1	
C4618		ECQB1H822JH	P.CAPACITOR 50V 8200P	1	
C4619		ECEA1APB100	E.CAPACITOR 10V 10U	1	
C4621		ECEA0JPK101	E.CAPACITOR 6.3V 100U	1	
C4629		ECQB1H103JZ	P.CAPACITOR 50V 0.01U	1	
C4636		ECUM1H471JN	C.CAPACITOR CH 50V 470P	1	
C4638		ECQB1H822JH	P.CAPACITOR 50V 8200P	1	
C4651		ECQB1H333JA	P.CAPACITOR 50V 0.033U	1	
C4652,53		ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	2	
D4501,02		MA151H	DIODE	2	
D4503		MA151K	DIODE	1	
D4504		MA151H	DIODE	1	
D4602		MA151K	DIODE	1	
FL4501		VLF0947M	FILTER	1	
IC4501		XLH7773KS	IC	1	
IC4601		BA7755AF	IC	1	
L4501,02		ELESQ101KA	COIL 100UH	2	
L4601		VLQEL07F153J	COIL 15MH	1	
PS4001-03		VJS3186B018	CONNECTOR (FEMALE) 18P	3	
Q4501		2SD655	TRANSISTOR	1	
Q4551		2SB561	TRANSISTOR	1	
Q4601		MSD1328	TRANSISTOR	1	
QR4508,09		MRN2404	TRANSISTOR-RESISTOR	2	
QR4510		MRN1403	TRANSISTOR-RESISTOR	1	
QR4602		MRN2402	TRANSISTOR-RESISTOR	1	
QR4603		MRN1404	TRANSISTOR-RESISTOR	1	
R4501,02		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
R4503		VRE0071E36C	RESISTOR	1	
R4504,05		ERJ6GEYJ393	M.RESISTOR CH 1/10W 39K	2	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R4506,07		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	2	
R4508		ERJ6GEYG224	M.RESISTOR CH 1/10W 220K	1	
R4509		ERJ6GEYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R4510		ERJ6GEYJ621	M.RESISTOR CH 1/10W 620	1	
R4511		ERJ6GEYG303	M.RESISTOR CH 1/10W 30K	1	
R4512		VRE0034E163	M.RESISTOR CH 1/10W 16K	1	
R4513		ERJ3GEYG103	M.RESISTOR CH 1/16W 10K	1	
R4514		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R4518,19		ERJ6GMZ0R00	M.RESISTOR 1/10W 0	2	
R4522		ERJ6GEYJ225	M.RESISTOR CH 1/10W 2.2M	1	
R4527		VRE0034E333	M.RESISTOR CH 1/10W 33K	1	
R4528		VRE0034E153	M.RESISTOR CH 1/10W 15K	1	
R4529		ERJ6GEYG562	M.RESISTOR CH 1/10W 5.6K	1	
R4530		ERJ3GEYJ334	M.RESISTOR CH 1/16W 330K	1	
R4534		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R4535		ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R4539		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R4540		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R4541		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R4542		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R4543		ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	1	
R4551,52		ERJ3GEYJ393	M.RESISTOR CH 1/16W 39K	2	
R4553		ERJ6GEYJ273	M.RESISTOR CH 1/10W 27K	1	
R4554		ERJ3GEYJ273	M.RESISTOR CH 1/16W 27K	1	
R4558		ERJ6GEYG224	M.RESISTOR CH 1/10W 220K	1	
R4561		ERJ6GEYG303	M.RESISTOR CH 1/10W 30K	1	
R4562		VRE0034E10C	RESISTOR	1	
R4563		ERJ3GEYG272	M.RESISTOR CH 1/16W 2.7K	1	
R4568		ERJ6GEYJ273	M.RESISTOR CH 1/10W 27K	1	
R4569		ERJ3GEYJ273	M.RESISTOR CH 1/16W 27K	1	
R4572		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R4573		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R4577		ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R4578		VRE0034E473	M.RESISTOR CH 1/10W 47K	1	
R4581		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R4583		ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
R4584		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R4585		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R4586		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R4587,88		ERJ3GEYJ273	M.RESISTOR CH 1/16W 27K	2	
R4591		ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R4592		ERJ6GEYJ563	M.RESISTOR CH 1/10W 56K	1	
R4593		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R4594		ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R4603		ERJ3GEYG183	M.RESISTOR CH 1/16W 18K	1	
R4606		ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R4610		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R4611,12		ERJ6GEYJ331	M.RESISTOR CH 1/10W 330	2	
R4613		ERJ6GEYJ394	M.RESISTOR CH 1/10W 390K	1	
R4615		ERJ6GEYJ133	M.RESISOTR CH 1/10W 13K	1	
R4616		ERJ6GEYJ105	M.RESISTOR CH 1/10W 1M	1	
R4638		ERJ6GMZ0R00	M.RESISTOR 1/10W 0	1	
R4649		ERJ3GEYG470	M.RESISTOR CH 1/16W 47	1	
R4651		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R4653		ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1	
R4654		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R4655		ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R4656		ERJ6GEYG243	M.RESISTOR CH 1/10W 24K	1	
R4657		ERJ6GEYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R4659		ERJ3GEYJ123	M.RESISTOR CH 1/16W 12K	1	
R4666		ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1	
VR4501		EVMECSA00B53	V.RESISTOR	1	
VR4502		EVMEASA00B24	V.RESISTOR	1	
VR4507		EVMEASA00B24	V.RESISTOR	1	
VR4509		EVMECSA00BY3	V.RESISTOR	1	
VR4550		EVMECSA00BS3	V.RESISTOR	1	
VR4551,52		EVMEASA00B55	V.RESISTOR	2	
	■	VEP04410R	Hi-Fi AUDIO PACK C.B.A.		(RTL)
					NV-HD100B/EB
					NV-HD100EO

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
					NV-HD100EG
C4502		ECUM1C104ZFN	C.CAPACITOR CH 16V 0.1U	1	
C4503		ECUX1H152KBV	C.CAPACITOR CH 50V 1500P	1	
C4504,05		ECEA1CP2470	E.CAPACITOR 16V 47U	2	
C4506		VCEA1CAH100	E.CAPACITOR 16V 10U	1	
C4507		ECQB1H223JA	P.CAPACITOR 50V 0.022U	1	
C4508		ECEA1EB24R7	E.CAPACITOR 25V 4.7U	1	
C4509		ECEA1AP2470	E.CAPACITOR 10V 47U	1	
C4510		ECQB1H103JA	P.CAPACITOR 50V 0.01U	1	
C4511		ECQB1H332JA	P.CAPACITOR 50V 3300P	1	
C4512		ECUX1H561JV	C.CAPACITOR CH 50V 560P	1	
C4513		ECUM1H681JN	C.CAPACITOR CH 50V 680P	1	
C4514		ECUM1H561JN	C.CAPACITOR CH 50V 560P	1	
C4515		VCEA1EAH4R7	E.CAPACITOR 25V 4.7U	1	
C4517		ECEA1AP2101	E.CAPACITOR 10V 100U	1	
C4518		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C4521		ECUM1C473KBV	C.CAPACITOR CH 16V 0.047U	1	
C4522		VCEA1HAH3R3	E.CAPACITOR 50V 3.3U	1	
C4528		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C4530		ECEA0JPK470	E.CAPACITOR 6.3V 47U	1	
C4533		ECEA1CP2330	E.CAPACITOR 16V 33U	1	
C4537		ECUM1H102JCN	C.CAPACITOR CH 50V 1000P	1	
C4538		ECEA1HUR47	E.CAPACITOR 50V 0.47U	1	
C4539		ECUM1C224ZFN	C.CAPACITOR CH 16V 0.22U	1	
C4541		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C4545		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C4552		ECUM1C104ZFN	C.CAPACITOR CH 16V 0.1U	1	
C4556		VCEA1CAH100	E.CAPACITOR 16V 10U	1	
C4557		ECQB1H223JA	P.CAPACITOR 50V 0.022U	1	
C4558		ECEA1EB24R7	E.CAPACITOR 25V 4.7U	1	
C4559		ECEA1AP2470	E.CAPACITOR 10V 47U	1	
C4560		ECQB1H103JA	P.CAPACITOR 50V 0.01U	1	
C4561		ECQB1H332JA	P.CAPACITOR 50V 3300P	1	
C4562		ECUM1H561JN	C.CAPACITOR CH 50V 560P	1	
C4563		ECUM1H681JN	C.CAPACITOR CH 50V 680P	1	
C4564		ECUM1H561JN	C.CAPACITOR CH 50V 560P	1	
C4565		VCEA1EAH4R7	E.CAPACITOR 25V 4.7U	1	
C4567		ECEA1AP2101	E.CAPACITOR 10V 100U	1	
C4568		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C4572		VCEA1HAH3R3	E.CAPACITOR 50V 3.3U	1	
C4576		ECUM1E473KBN	C.CAPACITOR CH 25V 0.047U	1	
C4583		ECEA1CP2330	E.CAPACITOR 16V 33U	1	
C4585,86		ECEA1AP2101	E.CAPACITOR 10V 100U	2	
C4591		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C4592		ECUX1H152KBV	C.CAPACITOR CH 50V 1500P	1	
C4604		ECUM1H182JN	C.CAPACITOR CH 50V 1800P	1	
C4606		VCEA0JAC470	E.CAPACITOR 6.3V 47U	1	
C4611		ECQB1H103JH	P.CAPACITOR 50V 0.01U	1	
C4613		ECUM1H471JCN	C.CAPACITOR CH 50V 470P	1	
C4616		ECUX1H102ZFV	C.CAPACITOR CH 50V 1000P	1	
C4617		ECEA10M22	E.CAPACITOR 10V 22U	1	
C4618		ECQB1H822JH	P.CAPACITOR 50V 8200P	1	
C4619		ECEA1APB100	E.CAPACITOR 10V 10U	1	
C4621		ECEA0JPK101	E.CAPACITOR 6.3V 100U	1	
C4629		ECQB1H103JZ	P.CAPACITOR 50V 0.01U	1	
C4636		ECUM1H471JN	C.CAPACITOR CH 50V 470P	1	
C4638		ECQB1H822JH	P.CAPACITOR 50V 8200P	1	
C4651		ECQB1H333JA	P.CAPACITOR 50V 0.033U	1	
C4652,53		ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	2	
D4501,02		MA151H	DIODE	2	
D4503		MA151K	DIODE	1	
D4504		MA151H	DIODE	1	
D4602		MA151K	DIODE	1	
FL4501		VLF0947M	FILTER	1	
IC4501		XLH7773KS	IC	1	
IC4601		BA7755AF	IC	1	
L4501,02		ELESQ101KA	COIL 100UH	2	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
L4601		VLQEL07F153J	COIL 15MH	1	
PS4001-03		VJS3186B018	CONNECTOR (FEMALE) 18P	3	
Q4501		2SD655	TRANSISTOR	1	
Q4551		2SB561	TRANSISTOR	1	
Q4601		MSD1328	TRANSISTOR	1	
QR4508,09		MRN2404	TRANSISTOR-RESISTOR	2	
QR4510		MRN1403	TRANSISTOR-RESISTOR	1	
QR4602		MRN2402	TRANSISTOR-RESISTOR	1	
QR4603		MRN1404	TRANSISTOR-RESISTOR	1	
R4501,02		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
R4503		VRE0071E36C	RESISTOR	1	
R4504,05		ERJ6GEYJ393	M.RESISTOR CH 1/10W 39K	2	
R4506,07		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	2	
R4508		ERJ6GEYG224	M.RESISTOR CH 1/10W 220K	1	
R4509		ERJ6GEYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R4510		ERJ6GEYJ621	M.RESISTOR CH 1/10W 620	1	
R4511		ERJ6GEYG303	M.RESISTOR CH 1/10W 30K	1	
R4512		VRE0034E163	M.RESISTOR CH 1/10W 16K	1	
R4513		ERJ3GEYG103	M.RESISTOR CH 1/16W 10K	1	
R4514		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R4518,19		ERJ6GMZ0R00	M.RESISTOR 1/10W 0	2	
R4522		ERJ6GEYJ225	M.RESISTOR CH 1/10W 2.2M	1	
R4527		VRE0034E333	M.RESISTOR CH 1/10W 33K	1	
R4528		VRE0034E153	M.RESISTOR CH 1/10W 15K	1	
R4529		ERJ6GEYG562	M.RESISTOR CH 1/10W 5.6K	1	
R4530		ERJ3GEYJ334	M.RESISTOR CH 1/16W 330K	1	
R4534		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R4535		ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R4539		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R4540		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R4541		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R4542		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R4543		ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	1	
R4551,52		ERJ3GEYJ393	M.RESISTOR CH 1/16W 39K	2	
R4553		ERJ6GEYJ273	M.RESISTOR CH 1/10W 27K	1	
R4554		ERJ3GEYJ273	M.RESISTOR CH 1/16W 27K	1	
R4558		ERJ6GEYG224	M.RESISTOR CH 1/10W 220K	1	
R4561		ERJ6GEYG303	M.RESISTOR CH 1/10W 30K	1	
R4562		VRE0034E10C	RESISTOR	1	
R4563		ERJ3GEYG272	M.RESISTOR CH 1/16W 2.7K	1	
R4568		ERJ6GEYJ273	M.RESISTOR CH 1/10W 27K	1	
R4569		ERJ3GEYJ273	M.RESISTOR CH 1/16W 27K	1	
R4573		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R4577		ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R4578		VRE0034E473	M.RESISTOR CH 1/10W 47K	1	
R4581		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R4583		ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
R4584		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R4585		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R4586		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R4587,88		ERJ3GEYJ273	M.RESISTOR CH 1/16W 27K	2	
R4591		ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R4592		ERJ6GEYJ563	M.RESISTOR CH 1/10W 56K	1	
R4593		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R4594		ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R4603		ERJ3GEYG183	M.RESISTOR CH 1/16W 18K	1	
R4606		ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R4610		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R4611,12		ERJ6GEYJ331	M.RESISTOR CH 1/10W 330	2	
R4613		ERJ6GEYJ394	M.RESISTOR CH 1/10W 390K	1	
R4615		ERJ6GEYJ133	M.RESISOTR CH 1/10W 13K	1	
R4616		ERJ6GEYJ105	M.RESISTOR CH 1/10W 1M	1	
R4638		ERJ6GMZ0R00	M.RESISTOR 1/10W 0	1	
R4649		ERJ3GEYG470	M.RESISTOR CH 1/16W 47	1	
R4651		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R4653		ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1	
R4654		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R4655		ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R4656		ERJ6GEYG243	M.RESISTOR CH 1/10W 24K	1	
R4657		ERJ6GEYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R4659		ERJ3GEYJ123	M.RESISTOR CH 1/16W 12K	1	
R4666		ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1	
VR4501		EVMECSA00B53	V.RESISTOR	1	
VR4502		EVMEASA00B24	V.RESISTOR	1	
VR4507		EVMEASA00B24	V.RESISTOR	1	
VR4509		EVMECSA00BY3	V.RESISTOR	1	
VR4512		EVNCBAA00B52	V.RESISTOR	1	
VR4550		EVMECSA00BS3	V.RESISTOR	1	
VR4551,52		EVMEASA00B55	V.RESISTOR	2	
	■	VEP04410B	Hi-Fi AUDIO PACK C.B.A.		(RTL)
					NV-F55A/EA/F
					NV-F55B/EB/EC
					NV-F55EG/EE/EV
					NV-F77EG/B/EC
C4502		ECUM1C104ZFN	C.CAPACITOR CH 16V 0.1U	1	
C4503		ECUX1H152KBV	C.CAPACITOR CH 50V 1500P	1	
C4504,05		ECEA1CP2470	E.CAPACITOR 16V 47U	2	
C4506		VCEA1CAH100	E.CAPACITOR 16V 10U	1	
C4507		ECQB1H223JA	P.CAPACITOR 50V 0.022U	1	
C4508		ECEA1EBZ4R7	E.CAPACITOR 25V 4.7U	1	
C4509		ECEA1APZ470	E.CAPACITOR 10V 47U	1	
C4510		ECQB1H103JA	P.CAPACITOR 50V 0.01U	1	
C4511		ECQB1H332JA	P.CAPACITOR 50V 3300P	1	
C4512		ECUX1H561JV	C.CAPACITOR CH 50V 560P	1	
C4513		ECUM1H681JN	C.CAPACITOR CH 50V 680P	1	
C4514		ECUM1H561JN	C.CAPACITOR CH 50V 560P	1	
C4515		VCEA1EAH4R7	E.CAPACITOR 25V 4.7U	1	
C4517		ECEA1APZ101	E.CAPACITOR 10V 100U	1	
C4518		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C4521		ECUM1C473KBV	C.CAPACITOR CH 16V 0.047U	1	
C4522		VCEA1HAH3R3	E.CAPACITOR 50V 3.3U	1	
C4528		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C4530		ECEA0JPK470	E.CAPACITOR 6.3V 47U	1	
C4533		ECEA1CPZ330	E.CAPACITOR 16V 33U	1	
C4537		ECUM1H102JCN	C.CAPACITOR CH 50V 1000P	1	
C4538		ECEA1HUR47	E.CAPACITOR 50V 0.47U	1	
C4539		ECUM1C224ZFN	C.CAPACITOR CH 16V 0.22U	1	
C4541		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C4545		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C4552		ECUM1C104ZFN	C.CAPACITOR CH 16V 0.1U	1	
C4556		VCEA1CAH100	E.CAPACITOR 16V 10U	1	
C4557		ECQB1H223JA	P.CAPACITOR 50V 0.022U	1	
C4558		ECEA1EBZ4R7	E.CAPACITOR 25V 4.7U	1	
C4559		ECEA1APZ470	E.CAPACITOR 10V 47U	1	
C4560		ECQB1H103JA	P.CAPACITOR 50V 0.01U	1	
C4561		ECQB1H332JA	P.CAPACITOR 50V 3300P	1	
C4562		ECUM1H561JN	C.CAPACITOR CH 50V 560P	1	
C4563		ECUM1H681JN	C.CAPACITOR CH 50V 680P	1	
C4564		ECUM1H561JN	C.CAPACITOR CH 50V 560P	1	
C4565		VCEA1EAH4R7	E.CAPACITOR 25V 4.7U	1	
C4567		ECEA1APZ101	E.CAPACITOR 10V 100U	1	
C4568		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C4572		VCEA1HAH3R3	E.CAPACITOR 50V 3.3U	1	
C4576		ECUM1E473KBN	C.CAPACITOR CH 25V 0.047U	1	
C4583		ECEA1CPZ330	E.CAPACITOR 16V 33U	1	
C4585,86		ECEA1APZ101	E.CAPACITOR 10V 100U	2	
C4591		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C4592		ECUX1H152KBV	C.CAPACITOR CH 50V 1500P	1	
C4604		ECUM1H182JN	C.CAPACITOR CH 50V 1800P	1	
C4606		VCEA0JAC470	E.CAPACITOR 6.3V 47U	1	
C4611		ECQB1H103JH	P.CAPACITOR 50V 0.01U	1	
C4613		ECUM1H471JCN	C.CAPACITOR CH 50V 470P	1	
C4616		ECUX1H102ZFV	C.CAPACITOR CH 50V 1000P	1	
C4617		ECEA10M22	E.CAPACITOR 10V 22U	1	
C4618		ECQB1H822JH	P.CAPACITOR 50V 8200P	1	
C4619		ECEA1APB100	E.CAPACITOR 10V 10U	1	
C4621		ECEA0JPK101	E.CAPACITOR 6.3V 100U	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C4629		ECQB1H103JZ	P.CAPACITOR 50V 0.01U	1	
C4636		ECUM1H471JN	C.CAPACITOR CH 50V 470P	1	
C4638		ECQB1H822JH	P.CAPACITOR 50V 8200P	1	
C4651		ECQB1H333JA	P.CAPACITOR 50V 0.033U	1	
C4652,53		ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	2	
D4501,02		MA151H	DIODE	2	
D4503		MA151K	DIODE	1	
D4504		MA151H	DIODE	1	
D4602		MA151K	DIODE	1	
FL4501		VLF0947M	FILTER	1	
IC4501		XLH7773KS	IC	1	
IC4601		BA7755AF	IC	1	
L4501,02		ELESQ101KA	COIL 100UH	2	
L4601		VLQEL07F153J	COIL 15MH	1	
PS4001-03		VJS3186B018	CONNECTOR (FEMALE) 18P	3	
Q4501		2SD655	TRANSISTOR	1	
Q4551		2SB561	TRANSISTOR	1	
Q4601		MSD1328	TRANSISTOR	1	
QR4508,09		MRN2404	TRANSISTOR-RESISTOR	2	
QR4510		MRN1403	TRANSISTOR-RESISTOR	1	
QR4602		MRN2402	TRANSISTOR-RESISTOR	1	
QR4603		MRN1404	TRANSISTOR-RESISTOR	1	
R4501,02		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
R4503		VRE0071E36C	RESISTOR	1	
R4504,05		ERJ6GEYJ393	M.RESISTOR CH 1/10W 39K	2	
R4506,07		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	2	
R4508		ERJ6GEYG224	M.RESISTOR CH 1/10W 220K	1	
R4509		ERJ6GEYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R4510		ERJ6GEYJ621	M.RESISTOR CH 1/10W 620	1	
R4511		ERJ6GEYG303	M.RESISTOR CH 1/10W 30K	1	
R4512		VRE0034E163	M.RESISTOR CH 1/10W 16K	1	
R4513		ERJ3GEYG103	M.RESISTOR CH 1/16W 10K	1	
R4514		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R4518,19		ERJ6GMZ0R00	M.RESISTOR 1/10W 0	2	
R4522		ERJ6GEYJ225	M.RESISTOR CH 1/10W 2.2M	1	
R4527		VRE0034E333	M.RESISTOR CH 1/10W 33K	1	
R4528		VRE0034E153	M.RESISTOR CH 1/10W 15K	1	
R4529		ERJ6GEYG562	M.RESISTOR CH 1/10W 5.6K	1	
R4530		ERJ3GEYJ334	M.RESISTOR CH 1/16W 330K	1	
R4534		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R4535		ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R4539		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R4540		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R4541		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R4542		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R4543		ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	1	
R4551,52		ERJ3GEYJ393	M.RESISTOR CH 1/16W 39K	2	
R4553		ERJ6GEYJ273	M.RESISTOR CH 1/10W 27K	1	
R4554		ERJ3GEYJ273	M.RESISTOR CH 1/16W 27K	1	
R4558		ERJ6GEYG224	M.RESISTOR CH 1/10W 220K	1	
R4561		ERJ6GEYG303	M.RESISTOR CH 1/10W 30K	1	
R4562		VRE0034E10C	RESISTOR	1	
R4563		ERJ3GEYG272	M.RESISTOR CH 1/16W 2.7K	1	
R4568		ERJ6GEYJ273	M.RESISTOR CH 1/10W 27K	1	
R4569		ERJ3GEYJ273	M.RESISTOR CH 1/16W 27K	1	
R4573		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R4577		ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R4578		VRE0034E473	M.RESISTOR CH 1/10W 47K	1	
R4581		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R4583		ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
R4584		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R4585		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R4586		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R4587,88		ERJ3GEYJ273	M.RESISTOR CH 1/16W 27K	2	
R4591		ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R4592		ERJ6GEYJ563	M.RESISTOR CH 1/10W 56K	1	
R4593		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R4594		ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R4603		ERJ3GEYG183	M.RESISTOR CH 1/16W 18K	1	
R4606		ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R4610		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R4611,12		ERJ6GEYJ331	M.RESISTOR CH 1/10W 330	2	
R4613		ERJ6GEYJ394	M.RESISTOR CH 1/10W 390K	1	
R4615		ERJ6GEYJ133	M.RESISOTR CH 1/10W 13K	1	
R4616		ERJ6GEYJ105	M.RESISTOR CH 1/10W 1M	1	
R4638		ERJ6GMZ0R00	M.RESISTOR 1/10W 0	1	
R4649		ERJ3GEYG470	M.RESISTOR CH 1/16W 47	1	
R4651		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R4653		ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1	
R4654		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R4655		ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R4656		ERJ6GEYG243	M.RESISTOR CH 1/10W 24K	1	
R4657		ERJ6GEYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R4659		ERJ3GEYJ123	M.RESISTOR CH 1/16W 12K	1	
R4666		ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1	
VR4501		EVMECSA00B53	V.RESISTOR	1	
VR4502		EVMEASA00B24	V.RESISTOR	1	
VR4507		EVMEASA00B24	V.RESISTOR	1	
VR4509		EVMECSA00BY3	V.RESISTOR	1	
VR4512		EVNCBAA00B52	V.RESISTOR	1	
VR4550		EVMECSA00BS3	V.RESISTOR	1	
VR4551,52		EVMEASA00B55	V.RESISTOR	2	
	■	VEP04410F	Hi-Fi AUDIO PACK C.B.A.		(RTL)
					NV-F55AM/MC
					NV-F95BN
					NV-F96BD
C4502		ECUM1C104ZFN	C.CAPACITOR CH 16V 0.1U	1	
C4503		ECUX1H152KBV	C.CAPACITOR CH 50V 1500P	1	
C4504,05		ECEA1CPZ470	E.CAPACITOR 16V 47U	2	
C4506		VCEA1CAH100	E.CAPACITOR 16V 10U	1	
C4507		ECQB1H223JA	P.CAPACITOR 50V 0.022U	1	
C4508		ECEA1EBZ4R7	E.CAPACITOR 25V 4.7U	1	
C4509		ECEA1APZ470	E.CAPACITOR 10V 47U	1	
C4510		ECQB1H103JA	P.CAPACITOR 50V 0.01U	1	
C4511		ECQB1H332JA	P.CAPACITOR 50V 3300P	1	
C4512		ECUX1H561JV	C.CAPACITOR CH 50V 560P	1	
C4513		ECUM1H681JN	C.CAPACITOR CH 50V 680P	1	
C4514		ECUM1H561JN	C.CAPACITOR CH 50V 560P	1	
C4515		VCEA1EAH4R7	E.CAPACITOR 25V 4.7U	1	
C4517		ECEA1APZ101	E.CAPACITOR 10V 100U	1	
C4518		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C4521		ECUM1C473KBV	C.CAPACITOR CH 16V 0.047U	1	
C4528		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C4530		ECEA0JPK221	E.CAPACITOR 6.3V 220U	1	
C4533		ECEA1CPZ330	E.CAPACITOR 16V 33U	1	
C4537		ECUM1H102JCN	C.CAPACITOR CH 50V 1000P	1	
C4538		ECEA1HUR47	E.CAPACITOR 50V 0.47U	1	
C4539		ECUM1C224ZFN	C.CAPACITOR CH 16V 0.22U	1	
C4541		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C4545		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C4552		ECUM1C104ZFN	C.CAPACITOR CH 16V 0.1U	1	
C4556		VCEA1CAH100	E.CAPACITOR 16V 10U	1	
C4557		ECQB1H223JA	P.CAPACITOR 50V 0.022U	1	
C4558		ECEA1EBZ4R7	E.CAPACITOR 25V 4.7U	1	
C4559		ECEA1APZ470	E.CAPACITOR 10V 47U	1	
C4560		ECQB1H103JA	P.CAPACITOR 50V 0.01U	1	
C4561		ECQB1H332JA	P.CAPACITOR 50V 3300P	1	
C4562		ECUM1H561JN	C.CAPACITOR CH 50V 560P	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C4563		ECUM1H681JN	C.CAPACITOR CH 50V 680P	1	
C4564		ECUM1H561JN	C.CAPACITOR CH 50V 560P	1	
C4565		VCEA1EAH4R7	E.CAPACITOR 25V 4.7U	1	
C4567		ECEA1APZ101	E.CAPACITOR 10V 100U	1	
C4568		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C4576		ECUM1E473KBN	C.CAPACITOR CH 25V 0.047U	1	
C4583		ECEA1CPZ330	E.CAPACITOR 16V 33U	1	
C4585,86		ECEA1APZ101	E.CAPACITOR 10V 100U	2	
C4591		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C4592		ECUX1H152KBV	C.CAPACITOR CH 50V 1500P	1	
C4604		ECUM1H182JN	C.CAPACITOR CH 50V 1800P	1	
C4606		VCEA0JAC470	E.CAPACITOR 6.3V 47U	1	
C4611		ECQB1H103JH	P.CAPACITOR 50V 0.01U	1	
C4613		ECUM1H471JCN	C.CAPACITOR CH 50V 470P	1	
C4616		ECUX1H102ZFV	C.CAPACITOR CH 50V 1000P	1	
C4617		ECEA10M22	E.CAPACITOR 10V 22U	1	
C4618		ECQB1H822JH	P.CAPACITOR 50V 8200P	1	
C4619		ECEA1APB100	E.CAPACITOR 10V 10U	1	
C4621		ECEA0JPK221	E.CAPACITOR 6.3V 220U	1	
C4629		ECQB1H103JZ	P.CAPACITOR 50V 0.01U	1	
C4636		ECUM1H471JN	C.CAPACITOR CH 50V 470P	1	
C4638		ECQB1H822JH	P.CAPACITOR 50V 8200P	1	
C4651		ECQB1H333JA	P.CAPACITOR 50V 0.033U	1	
C4652,53		ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	2	
D4501,02		MA151H	DIODE	2	
D4503		MA151K	DIODE	1	
D4504		MA151H	DIODE	1	
D4602		MA151K	DIODE	1	
FL4501		VLF0947M	FILTER	1	
IC4501		XLH7773KS	IC	1	
IC4601		BA7755AF	IC	1	
L4501,02		ELESQ101KA	COIL 100UH	2	
L4601		VLQEL07F153J	COIL 15MH	1	
PS4001-03		VJS3186B018	CONNECTOR (FEMALE) 18P	3	
Q4501		2SD655	TRANSISTOR	1	
Q4551		2SB561	TRANSISTOR	1	
Q4601		MSD1328	TRANSISTOR	1	
QR4508,09		MRN2404	TRANSISTOR-RESISTOR	2	
QR4510		MRN1403	TRANSISTOR-RESISTOR	1	
QR4602		MRN2402	TRANSISTOR-RESISTOR	1	
QR4603		MRN1404	TRANSISTOR-RESISTOR	1	
R4501,02		ERJ3GEYG363	M.RESISTOR CH 1/16W 36K	2	
R4503		VRE0071E36C	RESISTOR	1	
R4504,05		ERJ6GEYJ393	M.RESISTOR CH 1/10W 39K	2	
R4506,07		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	2	
R4508		ERJ6GEYG224	M.RESISTOR CH 1/10W 220K	1	
R4509		ERJ6GEYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R4510		ERJ6GEYJ621	M.RESISTOR CH 1/10W 620	1	
R4511		ERJ6GEYG303	M.RESISTOR CH 1/10W 30K	1	
R4512		VRE0034E163	M.RESISTOR CH 1/10W 16K	1	
R4513		ERJ3GEYG103	M.RESISTOR CH 1/16W 10K	1	
R4514		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R4518,19		ERJ6GMZ0R00	M.RESISTOR 1/10W 0	2	
R4522		ERJ6GEYJ225	M.RESISTOR CH 1/10W 2.2M	1	
R4527		VRE0034E333	M.RESISTOR CH 1/10W 33K	1	
R4528		VRE0034E153	M.RESISTOR CH 1/10W 15K	1	
R4529		ERJ6GEYG562	M.RESISTOR CH 1/10W 5.6K	1	
R4530		ERJ3GEYJ334	M.RESISTOR CH 1/16W 330K	1	
R4534		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R4535		ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R4539		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R4540		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R4541		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R4542		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R4543		ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	1	
R4551,52		ERJ3GEYJ393	M.RESISTOR CH 1/16W 39K	2	
R4553		ERJ6GEYJ273	M.RESISTOR CH 1/10W 27K	1	
R4554		ERJ3GEYJ273	M.RESISTOR CH 1/16W 27K	1	
R4558		ERJ6GEYG224	M.RESISTOR CH 1/10W 220K	1	
R4561		ERJ6GEYG303	M.RESISTOR CH 1/10W 30K	1	
R4562		VRE0034E10C	RESISTOR	1	
R4563		ERJ3GEYG272	M.RESISTOR CH 1/16W 2.7K	1	
R4568		ERJ6GEYJ273	M.RESISTOR CH 1/10W 27K	1	
R4569		ERJ3GEYJ273	M.RESISTOR CH 1/16W 27K	1	
R4573		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R4577		ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R4578		VRE0034E473	M.RESISTOR CH 1/10W 47K	1	
R4581		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R4584		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R4585		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R4586		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R4587,88		ERJ3GEYJ273	M.RESISTOR CH 1/16W 27K	2	
R4591		ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R4592		ERJ6GEYJ563	M.RESISTOR CH 1/10W 56K	1	
R4593		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R4594		ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R4603		ERJ3GEYG183	M.RESISTOR CH 1/16W 18K	1	
R4606		ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R4610		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R4611,12		ERJ6GEYJ331	M.RESISTOR CH 1/10W 330	2	
R4613		ERJ6GEYJ394	M.RESISTOR CH 1/10W 390K	1	
R4615		ERJ6GEYJ133	M.RESISOTR CH 1/10W 13K	1	
R4616		ERJ6GEYJ105	M.RESISTOR CH 1/10W 1M	1	
R4638		ERJ6GMZ0R00	M.RESISTOR 1/10W 0	1	
R4649		ERJ3GEYG470	M.RESISTOR CH 1/16W 47	1	
R4651		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R4653		ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1	
R4654		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R4655		ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R4656		ERJ6GEYG243	M.RESISTOR CH 1/10W 24K	1	
R4657		ERJ6GEYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R4659		ERJ3GEYJ123	M.RESISTOR CH 1/16W 12K	1	
R4666		ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1	
VR4501		EVMECSA00B53	V.RESISTOR	1	
VR4502		EVMEASA00B24	V.RESISTOR	1	
VR4507		EVMEASA00B24	V.RESISTOR	1	
VR4509		EVMECSA00BY3	V.RESISTOR	1	
VR4512		EVNCBAA00B52	V.RESISTOR	1	
VR4550		EVMECSA00BS3	V.RESISTOR	1	
VR4551,52		EVMEASA00B55	V.RESISTOR	2	
	■	VEP04410G	Hi-Fi AUDIO PACK C.B.A.		(RTL)
					NV-F55PX
C4502		ECUM1C104ZFN	C.CAPACITOR CH 16V 0.1U	1	
C4503		ECUX1H152KBV	C.CAPACITOR CH 50V 1500P	1	
C4504,05		ECEA1CPZ470	E.CAPACITOR 16V 47U	2	
C4506		VCEA1CAH100	E.CAPACITOR 16V 10U	1	
C4507		ECQB1H223JA	P.CAPACITOR 50V 0.022U	1	
C4508		ECEA1EBZ4R7	E.CAPACITOR 25V 4.7U	1	
C4509		ECEA1APZ470	E.CAPACITOR 10V 47U	1	
C4510		ECQB1H103JA	P.CAPACITOR 50V 0.01U	1	
C4511		ECQB1H332JA	P.CAPACITOR 50V 3300P	1	
C4512		ECUX1H561JV	C.CAPACITOR CH 50V 560P	1	
C4513		ECUM1H681JN	C.CAPACITOR CH 50V 680P	1	
C4514		ECUM1H561JN	C.CAPACITOR CH 50V 560P	1	
C4515		VCEA1EAH4R7	E.CAPACITOR 25V 4.7U	1	
C4517		ECEA1APZ101	E.CAPACITOR 10V 100U	1	
C4518		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C4521		ECUM1C473KBV	C.CAPACITOR CH 16V 0.047U	1	

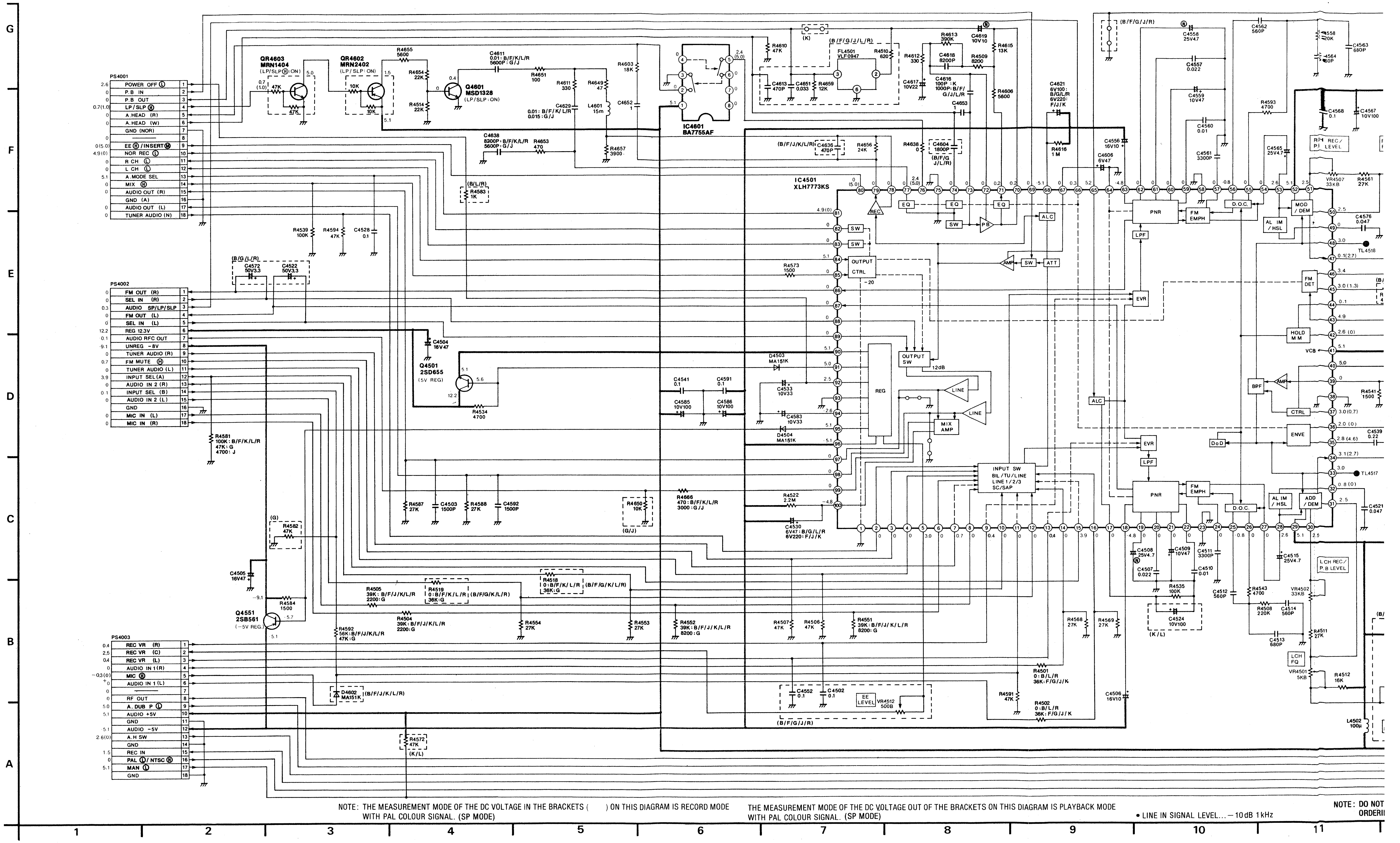
Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C4522		VCEA1HAH3R3	E.CAPACITOR 50V 3.3U	1	
C4528		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C4530		ECEA0JPK470	E.CAPACITOR 6.3V 47U	1	
C4533		ECEA1CPZ330	E.CAPACITOR 16V 33U	1	
C4537		ECUM1H102JCN	C.CAPACITOR CH 50V 1000P	1	
C4538		ECEA1HUR47	E.CAPACITOR 50V 0.47U	1	
C4539		ECUM1C224ZFN	C.CAPACITOR CH 16V 0.22U	1	
C4541		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C4552		ECUM1C104ZFN	C.CAPACITOR CH 16V 0.1U	1	
C4556		VCEA1CAH100	E.CAPACITOR 16V 10U	1	
C4557		ECQB1H223JA	P.CAPACITOR 50V 0.022U	1	
C4558		ECEA1EBZ4R7	E.CAPACITOR 25V 4.7U	1	
C4559		ECEA1APZ470	E.CAPACITOR 10V 47U	1	
C4560		ECQB1H103JA	P.CAPACITOR 50V 0.01U	1	
C4561		ECQB1H332JA	P.CAPACITOR 50V 3300P	1	
C4562		ECUM1H561JN	C.CAPACITOR CH 50V 560P	1	
C4563		ECUM1H681JN	C.CAPACITOR CH 50V 680P	1	
C4564		ECUM1H561JN	C.CAPACITOR CH 50V 560P	1	
C4565		VCEA1EAH4R7	E.CAPACITOR 25V 4.7U	1	
C4567		ECEA1APZ101	E.CAPACITOR 10V 100U	1	
C4568		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C4572		VCEA1HAH3R3	E.CAPACITOR 50V 3.3U	1	
C4576		ECUM1E473KBN	C.CAPACITOR CH 25V 0.047U	1	
C4583		ECEA1CPZ330	E.CAPACITOR 16V 33U	1	
C4585,86		ECEA1APZ101	E.CAPACITOR 10V 100U	2	
C4591		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C4592		ECUX1H152KBV	C.CAPACITOR CH 50V 1500P	1	
C4604		ECUM1H182JN	C.CAPACITOR CH 50V 1800P	1	
C4606		VCEA0JAC470	E.CAPACITOR 6.3V 47U	1	
C4611		ECQB1H562JH	P.CAPACITOR 50V 5600P	1	
C4613		ECUM1H471JCN	C.CAPACITOR CH 50V 470P	1	
C4616		ECUX1H102ZFV	C.CAPACITOR CH 50V 1000P	1	
C4617		ECEA1OM22	E.CAPACITOR 10V 22U	1	
C4618		ECQB1H822JH	P.CAPACITOR 50V 8200P	1	
C4619		ECEA1APB100	E.CAPACITOR 10V 10U	1	
C4621		ECEA0JPK101	E.CAPACITOR 6.3V 100U	1	
C4629		ECQB1H153JZ	P.CAPACITOR 50V 0.015U	1	
C4638		ECQB1H682JH	P.CAPACITOR 50V 6800P	1	
C4651		ECQB1H333JA	P.CAPACITOR 50V 0.033U	1	
C4652,53		ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	2	
D4502		MA151H	DIODE	1	
D4503		MA151K	DIODE	1	
D4504		MA151H	DIODE	1	
FL4501		VLF0947M	FILTER	1	
IC4501		XLH7773KS	IC	1	
IC4601		BA7755AF	IC	1	
L4501,02		ELESQ101KA	COIL 100UH	2	
L4601		VLQEL07F153J	COIL 15MH	1	
PS4001-03		VJS3186B018	CONNECTOR (FEMALE) 18P	3	
Q4501		2SD655	TRANSISTOR	1	
Q4551		2SB561	TRANSISTOR	1	
Q4601		MSD1328	TRANSISTOR	1	
QR4602		MRN2402	TRANSISTOR-RESISTOR	1	
QR4603		MRN1404	TRANSISTOR-RESISTOR	1	
R4501,02		ERJ3GEYG363	M.RESISTOR CH 1/16W 36K	2	
R4503		VRE0071E36C	RESISTOR	1	
R4504,05		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	2	
R4506,07		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	2	
R4508		ERJ6GEYG224	M.RESISTOR CH 1/10W 220K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R4509		ERJ6GEYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R4510		ERJ6GEYJ621	M.RESISTOR CH 1/10W 620	1	
R4511		ERJ6GEYG303	M.RESISTOR CH 1/10W 30K	1	
R4512		VRE0034E163	M.RESISTOR CH 1/10W 16K	1	
R4513		ERJ3GEYG103	M.RESISTOR CH 1/16W 10K	1	
R4514		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R4518,19		ERJ6GEYG363	M.RESISTOR CH 1/10W 36K	2	
R4522		ERJ6GEYJ225	M.RESISTOR CH 1/10W 2.2M	1	
R4527		VRE0034E333	M.RESISTOR CH 1/10W 33K	1	
R4528		VRE0034E153	M.RESISTOR CH 1/10W 15K	1	
R4529		ERJ6GEYG562	M.RESISTOR CH 1/10W 5.6K	1	
R4530		ERJ3GEYJ334	M.RESISTOR CH 1/16W 330K	1	
R4534		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R4535		ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R4539		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R4540		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R4541		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R4542		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R4543		ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	1	
R4551,52		ERJ3GEYJ822	M.RESISTOR CH 1/16W 8.2K	2	
R4553		ERJ6GEYJ273	M.RESISTOR CH 1/10W 27K	1	
R4554		ERJ3GEYJ273	M.RESISTOR CH 1/16W 27K	1	
R4558		ERJ6GEYG224	M.RESISTOR CH 1/10W 220K	1	
R4561		ERJ6GEYG303	M.RESISTOR CH 1/10W 30K	1	
R4562		VRE0034E10C	RESISTOR	1	
R4563		ERJ3GEYG302	M.RESISTOR CH 1/16W 3K	1	
R4568		ERJ6GEYJ273	M.RESISTOR CH 1/10W 27K	1	
R4569		ERJ3GEYJ273	M.RESISTOR CH 1/16W 27K	1	
R4573		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R4581,82		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	2	
R4584		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R4585		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R4586		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R4587,88		ERJ3GEYJ273	M.RESISTOR CH 1/16W 27K	2	
R4591		ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R4592		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R4593		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R4594		ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R4603		ERJ3GEYG183	M.RESISTOR CH 1/16W 18K	1	
R4606		ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R4610		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R4611,12		ERJ6GEYJ331	M.RESISTOR CH 1/10W 330	2	
R4613		ERJ6GEYJ394	M.RESISTOR CH 1/10W 390K	1	
R4615		ERJ6GEYJ133	M.RESISOTR CH 1/10W 13K	1	
R4616		ERJ6GEYJ105	M.RESISTOR CH 1/10W 1M	1	
R4638		ERJ6GMZ0R00	M.RESISTOR 1/10W 0	1	
R4649		ERJ3GEYG470	M.RESISTOR CH 1/16W 47	1	
R4650		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R4651		ERJ6GEYG101	M.RESISTOR CH 1/10W 100	1	
R4653		ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1	
R4654		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R4655.		ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R4656		ERJ6GEYG243	M.RESISTOR CH 1/10W 24K	1	
R4657		ERJ6GEYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R4659		ERJ3GEYJ123	M.RESISTOR CH 1/16W 12K	1	
R4666		ERJ6GEYJ302	M.RESISTOR CH 1/10W 3K	1	
VR4501		EVMECSA00B53	V.RESISTOR	1	
VR4502		EVMEASA00B24	V.RESISTOR	1	
VR4507		EVMEASA00B24	V.RESISTOR	1	
VR4509		EVMECSA00BY3	V.RESISTOR	1	
VR4512		EVNCBAA00B52	V.RESISTOR	1	
VR4550		EVMECSA00BS3	V.RESISTOR	1	
	■	VEP04410J	Hi-Fi AUDIO PACK C.B.A.		(RTL)
					NV-F55TN
C4502		ECUM1C104ZFN	C.CAPACITOR CH 16V 0.1U	1	
C4503		ECUX1H152KBV	C.CAPACITOR CH 50V 1500P	1	
C4504,05		ECEA1CPZ470	E.CAPACITOR 16V 47U	2	
C4506		VCEA1CAH100	E.CAPACITOR 16V 10U	1	
C4507		ECQB1H223JA	P.CAPACITOR 50V 0.022U	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C4508		ECEA1EBZ4R7	E.CAPACITOR 25V 4.7U	1	
C4509		ECEA1APZ470	E.CAPACITOR 10V 47U	1	
C4510		ECQB1H103JA	P.CAPACITOR 50V 0.01U	1	
C4511		ECQB1H332JA	P.CAPACITOR 50V 3300P	1	
C4512		ECUX1H561JV	C.CAPACITOR CH 50V 560P	1	
C4513		ECUM1H681JN	C.CAPACITOR CH 50V 680P	1	
C4514		ECUM1H561JN	C.CAPACITOR CH 50V 560P	1	
C4515		VCEA1EAH4R7	E.CAPACITOR 25V 4.7U	1	
C4517		ECEA1APZ101	E.CAPACITOR 10V 100U	1	
C4518		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C4521		ECUM1C473KBV	C.CAPACITOR CH 16V 0.047U	1	
C4528		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C4530		ECEA0JPK221	E.CAPACITOR 6.3V 220U	1	
C4533		ECEA1CPZ330	E.CAPACITOR 16V 33U	1	
C4537		ECUM1H102JCN	C.CAPACITOR CH 50V 1000P	1	
C4538		ECEA1HUR47	E.CAPACITOR 50V 0.47U	1	
C4539		ECUM1C224ZFN	C.CAPACITOR CH 16V 0.22U	1	
C4541		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C4545		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C4552		ECUM1C104ZFN	C.CAPACITOR CH 16V 0.1U	1	
C4556		VCEA1CAH100	E.CAPACITOR 16V 10U	1	
C4557		ECQB1H223JA	P.CAPACITOR 50V 0.022U	1	
C4558		ECEA1EBZ4R7	E.CAPACITOR 25V 4.7U	1	
C4559		ECEA1APZ470	E.CAPACITOR 10V 47U	1	
C4560		ECQB1H103JA	P.CAPACITOR 50V 0.01U	1	
C4561		ECQB1H332JA	P.CAPACITOR 50V 3300P	1	
C4562		ECUM1H561JN	C.CAPACITOR CH 50V 560P	1	
C4563		ECUM1H681JN	C.CAPACITOR CH 50V 680P	1	
C4564		ECUM1H561JN	C.CAPACITOR CH 50V 560P	1	
C4565		VCEA1EAH4R7	E.CAPACITOR 25V 4.7U	1	
C4567		ECEA1APZ101	E.CAPACITOR 10V 100U	1	
C4568		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C4576		ECUM1E473KBN	C.CAPACITOR CH 25V 0.047U	1	
C4583		ECEA1CPZ330	E.CAPACITOR 16V 33U	1	
C4585,86		ECEA1APZ101	E.CAPACITOR 10V 100U	2	
C4591		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C4592		ECUX1H152KBV	C.CAPACITOR CH 50V 1500P	1	
C4604		ECUM1H182JN	C.CAPACITOR CH 50V 1800P	1	
C4606		VCEA0JAC470	E.CAPACITOR 6.3V 47U	1	
C4611		ECQB1H562JH	P.CAPACITOR 50V 5600P	1	
C4613		ECUM1H471JCN	C.CAPACITOR CH 50V 470P	1	
C4616		ECUX1H102ZFV	C.CAPACITOR CH 50V 1000P	1	
C4617		ECEA1CM22	E.CAPACITOR 10V 22U	1	
C4618		ECQB1H822JH	P.CAPACITOR 50V 8200P	1	
C4619		ECEA1APB100	E.CAPACITOR 10V 10U	1	
C4621		ECEA0JPK221	E.CAPACITOR 6.3V 220U	1	
C4629		ECQB1H153JZ	P.CAPACITOR 50V 0.015U	1	
C4636		ECUM1H471JN	C.CAPACITOR CH 50V 470P	1	
C4638		ECQB1H682JH	P.CAPACITOR 50V 6800P	1	
C4651		ECQB1H333JA	P.CAPACITOR 50V 0.033U	1	
C4652,53		ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	2	
D4502		MA151H	DIODE	1	
D4503		MA151K	DIODE	1	
D4504		MA151H	DIODE	1	
D4602		MA151K	DIODE	1	
FL4501		VLF0947M	FILTER	1	
IC4501		XLH7773KS	IC	1	
IC4601		BA7755AF	IC	1	
L4501,02		ELESQ101KA	COIL 100UH	2	
L4601		VLQEL07F153J	COIL 15MH	1	
PS4001-03		VJS3186B018	CONNECTOR (FEMALE) 18P	3	
Q4501		2SD655	TRANSISTOR	1	
Q4551		2SB561	TRANSISTOR	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
Q4601		MSD1328	TRANSISTOR	1	
QR4602		MRN2402	TRANSISTOR-RESISTOR	1	
QR4603		MRN1404	TRANSISTOR-RESISTOR	1	
R4501,02		ERJ3GEYG363	M.RESISTOR CH 1/16W 36K	2	
R4503		VRE0071E36C	RESISTOR	1	
R4504,05		ERJ6GEYJ393	M.RESISTOR CH 1/10W 39K	2	
R4506,07		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	2	
R4508		ERJ6GEYG224	M.RESISTOR CH 1/10W 220K	1	
R4509		ERJ6GEYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R4510		ERJ6GEYJ621	M.RESISTOR CH 1/10W 620	1	
R4511		ERJ6GEYG303	M.RESISTOR CH 1/10W 30K	1	
R4512		VRE0034E163	M.RESISTOR CH 1/10W 16K	1	
R4513		ERJ3GEYG103	M.RESISTOR CH 1/16W 10K	1	
R4514		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R4522		ERJ6GEYJ225	M.RESISTOR CH 1/10W 2.2M	1	
R4527		VRE0034E333	M.RESISTOR CH 1/10W 33K	1	
R4528		VRE0034E153	M.RESISTOR CH 1/10W 15K	1	
R4529		ERJ6GEYG562	M.RESISTOR CH 1/10W 5.6K	1	
R4530		ERJ3GEYJ334	M.RESISTOR CH 1/16W 330K	1	
R4534		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R4535		ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R4539		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R4540		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R4541		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R4542		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R4543		ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	1	
R4551,52		ERJ3GEYJ393	M.RESISTOR CH 1/16W 39K	2	
R4553		ERJ6GEYJ273	M.RESISTOR CH 1/10W 27K	1	
R4554		ERJ3GEYJ273	M.RESISTOR CH 1/16W 27K	1	
R4558		ERJ6GEYG224	M.RESISTOR CH 1/10W 220K	1	
R4561		ERJ6GEYG303	M.RESISTOR CH 1/10W 30K	1	
R4562		VRE0034E10C	RESISTOR	1	
R4563		ERJ3GEYG302	M.RESISTOR CH 1/16W 3K	1	
R4568		ERJ6GEYJ273	M.RESISTOR CH 1/10W 27K	1	
R4569		ERJ3GEYJ273	M.RESISTOR CH 1/16W 27K	1	
R4573		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R4578		VRE0034E473	M.RESISTOR CH 1/10W 47K	1	
R4581		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R4584		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R4585		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R4586		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R4587,88		ERJ3GEYJ273	M.RESISTOR CH 1/16W 27K	2	
R4591		ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R4592		ERJ6GEYJ563	M.RESISTOR CH 1/10W 56K	1	
R4593		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R4594		ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R4603		ERJ3GEYG183	M.RESISTOR CH 1/16W 18K	1	
R4606		ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R4610		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R4611,12		ERJ6GEYJ331	M.RESISTOR CH 1/10W 330	2	
R4613		ERJ6GEYJ394	M.RESISTOR CH 1/10W 390K	1	
R4615		ERJ6GEYJ133	M.RESISTOR CH 1/10W 13K	1	
R4616		ERJ6GEYJ105	M.RESISTOR CH 1/10W 1M	1	
R4638		ERJ6GMZ0R00	M.RESISTOR 1/10W 0	1	
R4649		ERJ3GEYG470	M.RESISTOR CH 1/16W 47	1	
R4650		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R4651		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R4653		ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1	
R4654		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R4655		ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R4656		ERJ6GEYG243	M.RESISTOR CH 1/10W 24K	1	
R4657		ERJ6GEYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R4659		ERJ3GEYJ123	M.RESISTOR CH 1/16W 12K	1	
R4666		ERJ6GEYJ302	M.RESISTOR CH 1/10W 3K	1	
VR4501		EVMECSA00B53	V.RESISTOR	1	
VR4502		EVMEASA00B24	V.RESISTOR	1	
VR4507		EVMEASA00B24	V.RESISTOR	1	
VR4509		EVMECSA00BY3	V.RESISTOR	1	
VR4512		EVNCBAA00B52	V.RESISTOR	1	
VR4550		EVMECSA00BS3	V.RESISTOR	1	

3. Hi-Fi AUDIO PACK SCHEMATIC DIAGRAM

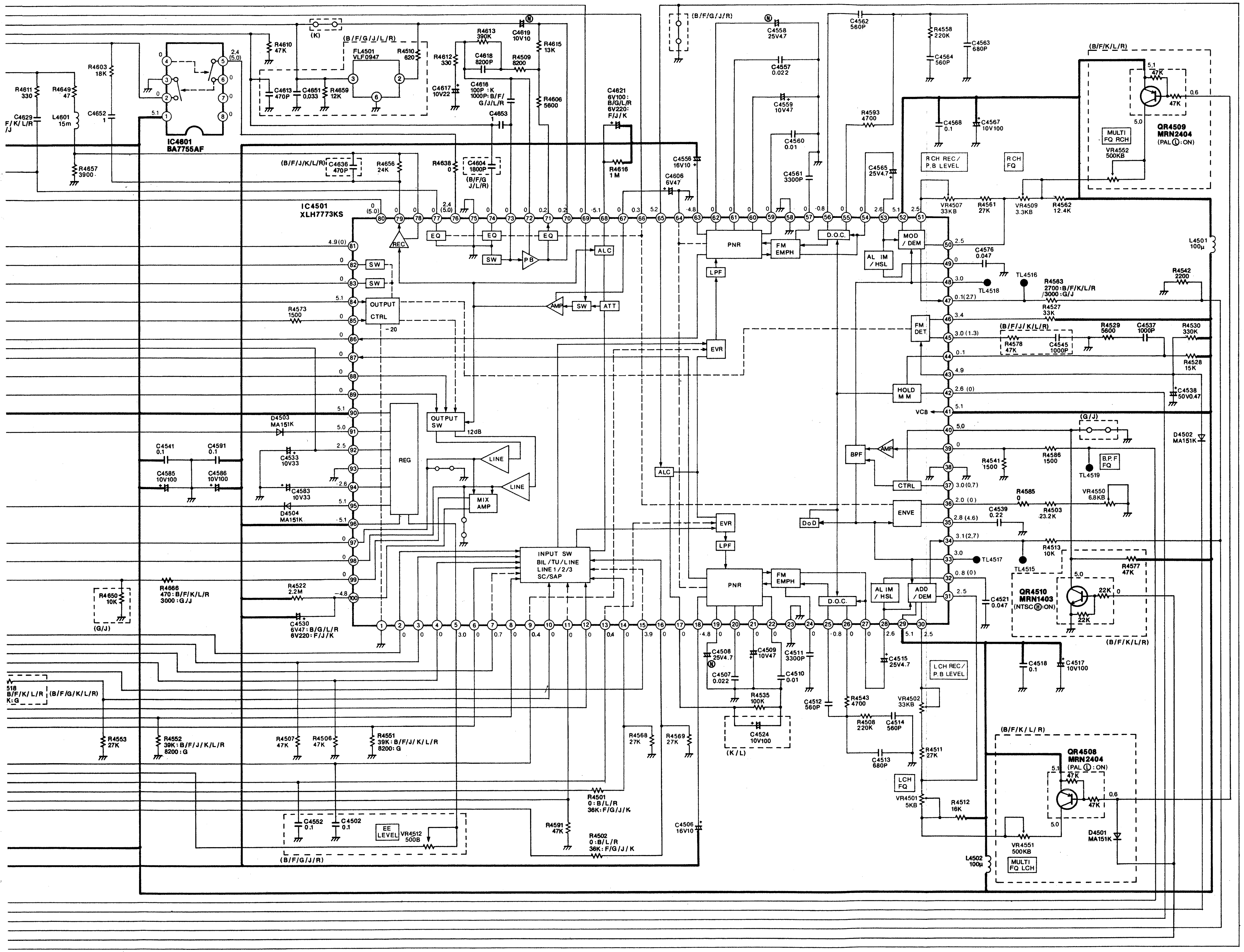

G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10
11
PS4001
POWER OFF Ⓛ
P.B IN
P.B OUT
LP/SLP Ⓗ
A.HEAD (R)
A.HEAD (W)
GND (NOR)
EE Ⓗ/INSERT Ⓜ
NOR REC Ⓛ
R CH Ⓛ
L CH Ⓛ
A.MODE SEL
MIX Ⓗ
AUDIO OUT (R)
GND (A)
AUDIO OUT (L)
TUNER AUDIO (N)
PS4002
FM OUT (R)
SEL IN (R)
AUDIO SP/LP/SLP
FM OUT (L)
SEL IN (L)
REG 12.3V
AUDIO RFC OUT
UNREG -8V
TUNER AUDIO (R)
FM MUTE Ⓗ
TUNER AUDIO (L)
INPUT SEL (A)
AUDIO IN 2 (R)
INPUT SEL (B)
AUDIO IN 2 (L)
GND
MIC IN (L)
MIC IN (R)
PS4003
REC VR (R)
REC VR (C)
REC VR (L)
AUDIO IN 1 (R)
MIC Ⓗ
AUDIO IN 1 (L)
RF OUT
A. DUB P Ⓛ
AUDIO +5V
GND
AUDIO -5V
A.H SW
GND
REC IN
PAL Ⓛ/ NTSC Ⓗ
MAN Ⓛ
GND
QR4603 MRN1404 (LP/SLP Ⓗ:ON)
QR4602 MRN2402 (LP/SLP:ON)
Q4601 MSD1328 (LP/SLP:ON)
IC4601 BA7755AF
FL4501 VLF0947
IC4501 XLH7773KS
Q4501 2SD655 (5V REG)
Q4551 2SB561 (-5V REG.)
D4503 MA151K
D4504 MA151K
D4602 MA151K (B/F/J/K/L/R)
REG
OUTPUT CTRL
OUTPUT SW
INPUT SW BIL/TU/LINE LINE 1/2/3 SC/SAP
MIX AMP
LINE
PNR
FM EMPH
D.O.C.
ALC
EVR
LPF
FM DET
HOLD MM
BPF
AMP
CTRL
ENVE
DoD
AL IM / HSL
ADD / DEM
MOD / DEM
EQ
SW
PB
REC
ATT
R CH REC / PB LEVEL
L CH REC / P.B LEVEL
L CH FQ
EE LEVEL VR4512 500B
VCB
TL4517
TL4518

NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS ( ) ON THIS DIAGRAM IS RECORD MODE WITH PAL COLOUR SIGNAL. (SP MODE)

THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE WITH PAL COLOUR SIGNAL. (SP MODE)

- LINE IN SIGNAL LEVEL… −10dB 1kHz

NOTE: DO NOT ORDERI


IC4801
BA7755AF
IC4501
XLH7773KS
FL4501
VLF0947
PNR
FM EMPH
D.O.C.
MOD / DEM
AL IM / HSL
ADD / DEM
FM DET
HOLD MM
BPF
CTRL
ENVE
DOD
EVR
LPF
ALC
ATT
AMP
SW
EQ
REC
PB
OUTPUT CTRL
OUTPUT SW
REG
LINE
MIX AMP
INPUT SW
BIL/TU/LINE
LINE 1/2/3
SC/SAP
R CH REC/P.B LEVEL
R CH FQ
L CH REC/P.B LEVEL
L CH FQ
MULTI FQ RCH
MULTI FQ LCH
EE LEVEL
QR4509
MRN2404
(PAL Ⓛ:ON)
QR4508
MRN2404
(PAL Ⓛ:ON)
QR4510
MRN1403
(NTSC Ⓗ:ON)
D4501
MA151K
D4502
MA151K
D4503
MA151K
D4504
MA151K
L4501
100µ
L4502
100µ
VCB
B.P.F FQ
TL4515
TL4516
TL4517
TL4518
TL4519
(B/F/G/J/R)
(B/F/K/L/R)
(B/F/J/K/L/R)
(G/J)
(K/L)
(K)

RACKETS (   ) ON THIS DIAGRAM IS RECORD MODE

THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE WITH PAL COLOUR SIGNAL. (SP MODE)

- LINE IN SIGNAL LEVEL... −10dB 1kHz

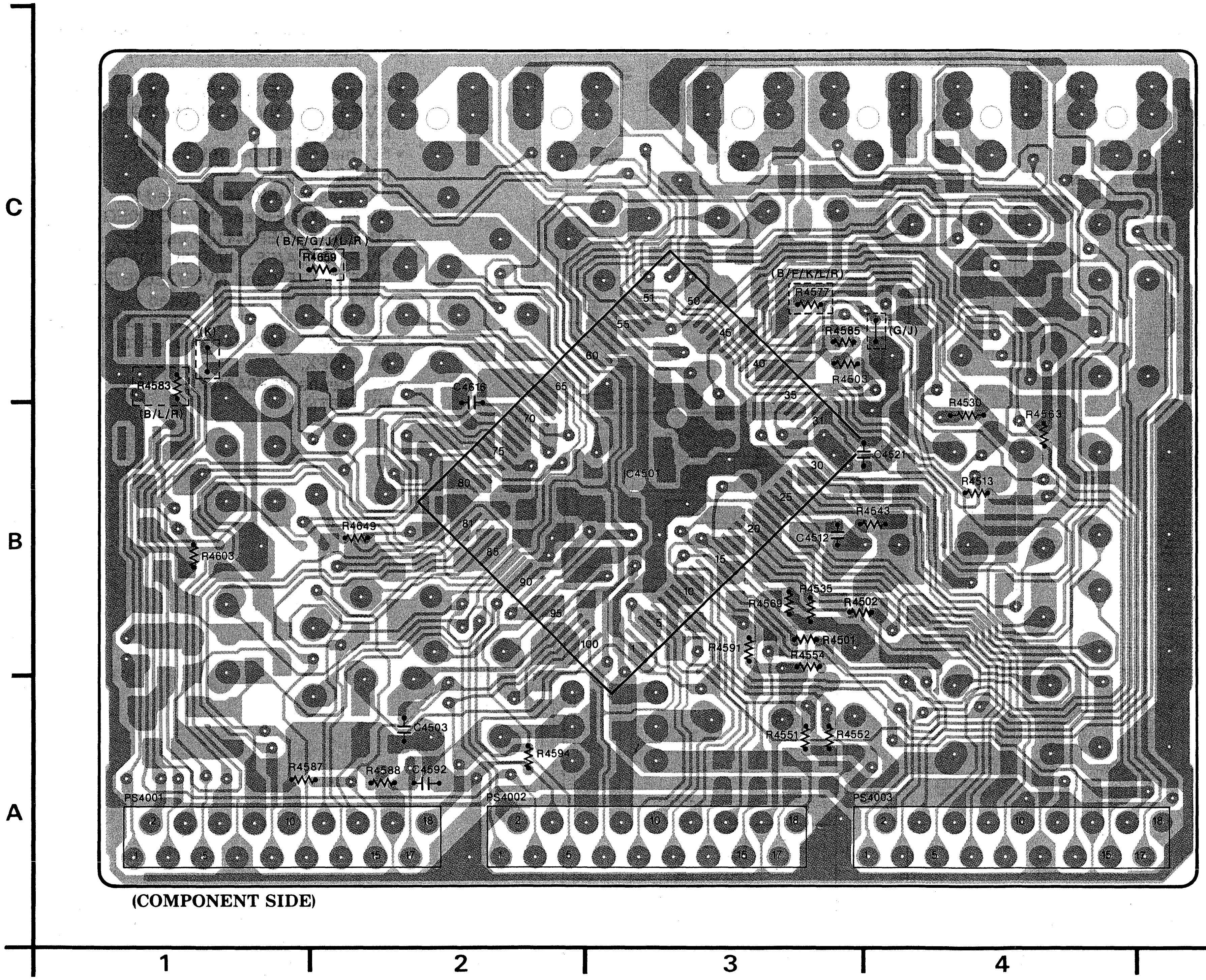
NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13

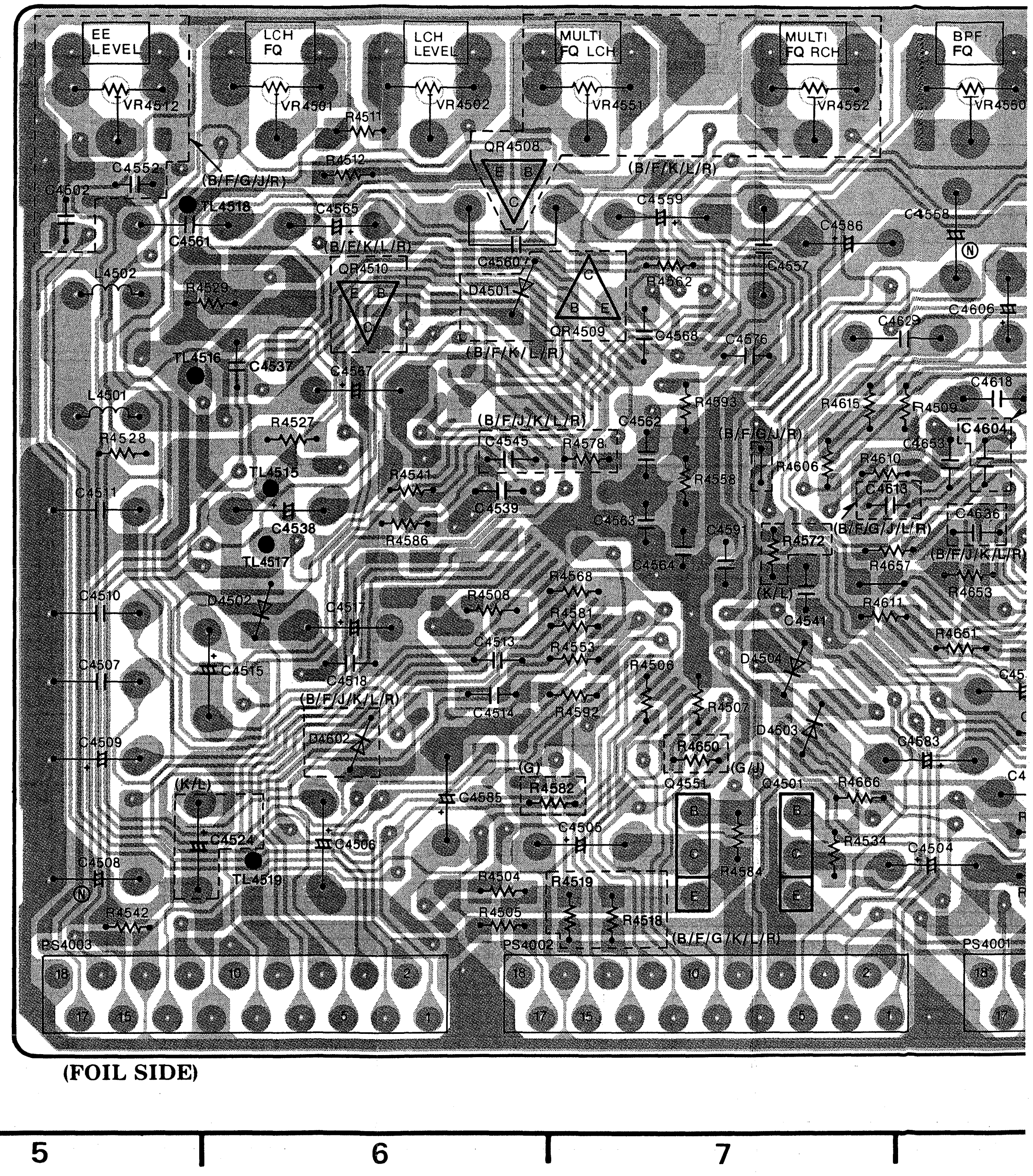
NOTE:
K, L, R, B, F, G and J in the circuit mean the use of parts for C.B.A.s (Models).

- "K" means **VEP04410K** used for NV-F125BD, NV-HD100AM/MC and NV-HD80MC.
- "L" means **VEP04410L** used for NV-HD100A/EA.
- "R" means **VEP04410R** used for NV-HD100B/EB and NV-HD100EG/EO.
- "B" means **VEP04410B** used for NV-F55A/EA/EE, NV-F55F, NV-F55B/EB/EC, NV-F55EG/EV and NV-F77EG/B/EC.
- "F" means **VEP04410F** used for NV-F55AM/MC, NV-F95BN and NV-F96BD.
- "G" means **VEP04410G** used for NV-F55PX.
- "J" means **VEP04410J** used for NV-F55TN.

4. Hi-Fi AUDIO PACK C.B.A.s


C
B
A
1
2
3
4
(B/F/G/J/L/R)
R4659
(K)
R4583
(B/L/R)
R4603
R4649
C4616
IC4501
(B/F/K/L/R)
R4577
R4585
(G/J)
R4503
R4530
R4563
C4521
R4513
R4543
C4512
R4569
R4535
R4502
R4591
R4501
R4554
R4551
R4552
C4503
R4587
R4588
C4592
R4594
PS4001
PS4002
PS4003

(COMPONENT SIDE)


5
6
7
EE LEVEL
VR4512
LCH FQ
VR4501
LCH LEVEL
VR4502
MULTI FQ LCH
VR4551
MULTI FQ RCH
VR4552
BPF FQ
VR4550
R4511
R4512
QR4508
(B/F/K/L/R)
C4552
C4502
(B/F/G/J/R)
TL4518
C4565
C4561
C4559
C4586
C4558
C4560
QR4510
D4501
R4562
C4557
L4502
R4529
QR4509
C4568
C4576
C4606
C4629
TL4516
C4537
C4567
R4593
R4615
R4509
C4618
L4501
R4528
R4527
(B/F/J/K/L/R)
C4545
R4578
C4562
R4606
R4610
IC4604
C4653
C4511
TL4515
R4541
C4539
R4586
C4563
R4556
C4613
C4538
TL4517
C4564
C4591
R4572
(B/F/G/J/L/R)
C4636
R4657
R4653
C4510
D4502
C4517
R4508
R4568
R4581
(K/L)
C4541
R4611
R4651
C4507
C4513
R4553
R4506
D4504
C4515
C4518
C4514
R4592
R4507
C4509
D4503
D4602
R4650
(G/J)
C4583
(G)
R4582
Q4551
Q4501
R4666
C4685
C4524
C4506
C4505
R4534
C4504
C4508
TL4519
R4584
R4504
R4519
R4505
R4518
R4542
(B/F/G/K/L/R)
PS4003
PS4002
PS4001

(FOIL SIDE)